

For Reference

NOT TO BE TAKEN FROM THIS ROOM

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex libris
UNIVERSITATIS
ALBERTAENSIS



THE UNIVERSITY OF ALBERTA

A COMPARATIVE STUDY OF VALUE ORIENTATIONS
IN AN ALBERTA INDIAN COMMUNITY

by

LESLIE ROBB GUE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

APRIL, 1967

UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "A Comparative Study of Value Orientations in an Alberta Indian Community", submitted by Leslie Robb Gue in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

ABSTRACT

This study examined the value orientation patterns of Indian parents, adolescent Indian pupils, and teachers and administrators in an isolated northern region of Alberta, Canada. The study was based upon the theory and method of Florence Kluckhohn. Dominant value orientations of parents, pupils, and teachers, and significant variations in total value orientation patterns among the three groups were investigated. Relationships between value orientation patterns within the three groups according to certain criterion variables were also explored.

Data were collected by means of a Parent's Interview Schedule from thirty Indian parents in their homes in Wabasca, Alberta, a Pupil's Questionnaire completed by 138 adolescent Indian pupils in group sittings in the two schools in Wabasca, and a Teacher's and Administrator's Questionnaire, completed by 129 teachers and administrators in Northland School Division #61.

In the Relational value orientation area, parents and pupils ranked their preferences as Lineality preferred to Collaterality preferred to Individualism, but teachers chose Individualism over Lineality over Collaterality. In the Time value orientation area, parents, pupils and teachers preferred Future over Present over Past. In the Man-Nature value orientation area, parents and teachers chose Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature. Pupils preferred Subject-to-Nature over Mastery-over-Nature over Harmony-with-Nature. In the Activity value orientation area, all groups agreed upon Being-in-Becoming over Doing

over Being.

Statistically significant differences were found between the patterns of parents and pupils, parents and teachers, pupils and teachers, and Treaty and Non-Treaty pupils. No significant overall pattern differences were found between teachers recruited in the United Kingdom in 1965 and other Northland teachers, although variations appeared in many items. Teachers with the least amount of teacher education displayed value orientation patterns closer to those of Indian parents than did teachers with the highest level of teacher education. Patterns of male pupils approximated those of teachers more closely than did patterns of female pupils. To a limited extent, the older the Indian pupil and the greater his residential school experience, the nearer was his value orientation pattern to that of teachers. The pattern of the fourteen-year-old pupils was found to be closest to that of teachers and administrators.

Parents' and pupils' knowledge of occupations was found to be very scanty compared with that of the teachers, and to cluster in the group of occupations classified, with the help of the Blishen scale, as "Very Low." In the matter of discipline, parents, pupils and teachers gave first preference to Insightful discipline, but differed between Physical and Emotional discipline as their second-order choice. In learning English, parents gave equal weight to Rote Memorization and Translating. Pupils chose Translating, then Rote Memorization, then Thinking in English.

This study demonstrated the usefulness of the Kluckhohn model for

testing inter- and intra-cultural variations in value orientations, and posed a number of questions for further research. Among these are the need for further refinement of the instrument to investigate a wider range of behavior spheres, the effects of maturation and years of teacher education upon value orientations, and the need to examine the appropriateness of the objectives of education for schools serving pupils of Indian ancestry.

ACKNOWLEDGEMENTS

The writer wishes to thank Dr. F. Enns, supervisor of the thesis, for his encouragement and prompt, thorough attention to all matters pertaining to the planning, development, and completion of the study. Dr. A. D. Fisher and Dr. W. D. Knill, members of the thesis committee, gave many helpful suggestions during the course of the work.

The excellent co-operation received from the Board and staff of the Edmonton Public School system during the pilot study, and from the Board and staff of Northland School Division #61 during all phases of the investigation, are gratefully acknowledged.

Most welcome, indeed, was the grant-in-aid received from the Canadian Education Association, as was the generous financial assistance received from the Indian Affairs Branch of the Department of Indian Affairs and Northern Development, through Dr. H. B. Hawthorn, Director, Indian Research Project.

The burdens of field work were greatly ameliorated by the warm hospitality of Mr. and Mrs. Harvey Burkholder, Calling Lake, Rev. G. Tessier, and the staff of the Mission St. Martin, Desmarais, and many others. Invaluable assistance was received from the chief interpreter, Mrs. Clara Yellowknee, and her substitutes, Mr. Samuel Auger and Mr. Oliver Yellowknee, and from the Principals of St. Theresa and Mistassiniy Schools, Mrs. Jean Kapoor and Mr. Paul Landis.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
The Problem	1
Significance of the Study	2
The Sub-problems	6
Delimitation of the Study	7
Limitations of the Study	8
Assumptions	9
Definitions of Terms Used	10
Organization of the Thesis	10
II. THEORETICAL FRAMEWORK	12
Concepts of Value	12
Theory of Dominant and Variant Value Orientations - F. Kluckhohn	19
Summary and Implications for the Present Study . .	35
III. REVIEW OF RESEARCH LITERATURE	38
Education-Centered Studies	38
Studies of Indian Acculturation	48
Studies of Values and Value Orientations	53
Summary	67
IV. RESEARCH DESIGN	69
The Hypotheses	69

CHAPTER	PAGE
Instrumentation	72
The Pilot Study	84
Data Collection	89
The Sample	93
Data Processing	100
Statistical Analysis	100
Summary	113
 V. VALUE ORIENTATION PATTERNS OF PARENTS, PUPILS, AND	
TEACHERS IN NORTHLAND SCHOOL DIVISION #61	115
Value Orientation Patterns of Parents	117
Value Orientation Patterns of Pupils	118
Value Orientation Patterns of Teachers	119
Summary	120
 VI. VARIATIONS IN VALUE ORIENTATION PATTERNS OF	
PARENTS AND PUPILS	122
Relational Value Orientation Area	123
Time Value Orientation Area	132
Man-Nature Value Orientation Area	137
Activity Value Orientation Area	141
Testing Hypothesis Four	145
Summary	146

CHAPTER	PAGE
VII. VARIATIONS IN VALUE ORIENTATION PATTERNS OF PARENTS	
AND TEACHERS	149
Relational Value Orientation Area	149
Time Value Orientation Area	159
Man-Nature Value Orientation Area	164
Activity Value Orientation Area	168
Testing Hypothesis Five	172
Testing Sub-hypothesis 5.1	174
Summary	176
VIII. VARIATIONS IN VALUE ORIENTATION PATTERNS OF PUPILS	
AND TEACHERS	178
Relational Value Orientation Area	178
Time Value Orientation Area	186
Man-Nature Value Orientation Area	189
Activity Value Orientation Area	192
Testing Hypothesis Six	194
Testing Sub-hypothesis 6.1	196
Testing Sub-hypothesis 6.2	200
Testing Sub-hypothesis 6.3	203
Testing Sub-hypothesis 6.4	204
Summary	207

CHAPTER

PAGE

IX.	TREATY AND NON-TREATY PUPILS; UNITED KINGDOM AND	
	ALL OTHER TEACHERS; MISCELLANEOUS ITEMS	210
	Value Orientation Patterns of Treaty and Non-	
	Treaty Pupils	210
	Testing Hypothesis Seven	223
	Value Orientation Patterns of Teachers Recruited	
	in the United Kingdom in 1965 and All Other	
	Teachers and Administrators, Northland School	
	Division #61	225
	Testing Hypothesis Eight	238
	Miscellaneous Items	240
	Item 23: Types of Discipline	241
	Item 26: Learning English	243
	Item 25: Occupations	244
	Summary	250
X.	SUMMARY, CONCLUSIONS, AND IMPLICATIONS	254
	Problem, Theory, and Methodology	254
	The Problem	254
	Theoretical Framework	255
	Instrumentation	256
	Sample	257
	Data Collection	257
	Statistical Treatment	258

CHAPTER	PAGE
Findings, Conclusions and Implications	259
Dominant Value Orientations of Parents, Pupils, and Teachers	259
Variations in Total Value Orientation Patterns . .	260
Variations by Cultural Groupings	272
Miscellaneous Items	273
Concluding Observations	274
Kluckhohn Theory and Method	274
Program Development for Indian Schools	275
Teacher Education	276
Further Research	276
BIBLIOGRAPHY	278
APPENDIX A PARENT'S INTERVIEW SCHEDULE	286
APPENDIX B PUPIL'S QUESTIONNAIRE	305
APPENDIX C TEACHER'S AND ADMINISTRATOR'S QUESTIONNAIRE	310
APPENDIX D CORRESPONDENCE	329
APPENDIX E SUPPLEMENTARY TABLES	339

LIST OF TABLES

TABLE		PAGE
I.	Government of Canada Expenditures on Behalf of Indians . .	4
II.	Common Human Problems and Value Orientation Areas	23
III.	Five Value Orientation Areas and the Range of Value Orientation Positions Possible in Each	24
IV.	Value Orientations of Oregon Teachers and School Board Members	59
V.	Origin of Items in the Relational Value Orientation Area - Parent's Interview Schedule and Pupil's Questionnaire	76
VI.	Origin of Items in the Time Value Orientation Area - Parent's Interview Schedule and Pupil's Questionnaire . .	78
VII.	Origin of Items in the Man-Nature Value Orientation Area - Parent's Interview Schedule and Pupil's Questionnaire	79
VIII.	Origin of Items in the Activity Value Orientation Area - Parent's Interview Schedule and Pupil's Questionnaire . .	80
IX.	Origin of Items in the Teacher's and Administrator's Questionnaire	81
X.	Miscellaneous Items	83
XI.	Distribution of Items by Value Orientation Area and Behavior Sphere	85
XII.	Numbering of Items in Pilot Study and Final Study	86

TABLE	PAGE
XIII. Distribution and Return of Teacher's and Administrator's Questionnaires	91
XIV. Distribution of Teacher and Administrator Sample by 1965 Recruitment, Age, Sex, and Years of Teacher Education . .	94
XV. Distribution of Teacher and Administrator Sample by 1965 Recruitment, Sex, and Marital Status	95
XVI. Distribution of Parent Sample by Age, Sex, Treaty Status, and Number of Years' Schooling	97
XVII. Distribution of Pupil Sample by Age, Sex, Treaty Status, and Residential School Experience	98
XVIII. Distribution of Pupil Sample by Grade and Treaty Status . .	99
XIX. Distribution of Pupil Sample by Sex, Age, and Grade	99
XX. Value Orientation Patterns of Parents, Pupils, and Teachers in Northland School Division #61	116
XXI. Rank-ordering, Homogeneity of Response Patterns, and Ordering Distance of Parents and Pupils	124
XXII. Differences in Value Orientations of Parents and Pupils by Type and Degree of Homogeneity of Response Patterns . .	147
XXIII. Rank-ordering, Homogeneity of Response Patterns and Ordering Distance of Parents and Teachers	150
XXIV. Differences in Value Orientations of Parents and Teachers by Type and Degree of Homogeneity of Response Patterns . .	173
XXV. Differences in Value Orientation Patterns of Parents and Teachers According to Years of Teacher Education and Type and Degree of Homogeneity of Response	175

TABLE	PAGE
XXVI. Rank-ordering, Homogeneity of Response Patterns, and Ordering Distance of Pupils and Teachers	179
XXVII. Differences in Value Orientations of Pupils and Teachers by Type and Degree of Homogeneity of Response Patterns . .	195
XXVIII. Differences in Value Orientation Patterns of Teachers and Pupils Grouped by Age, and by Type and Degree of Homogeneity of Response Patterns	198
XXIX. Value Orientation Patterns of All Pupils and Pupils Grouped by Age	199
XXX. Differences in Value Orientation Patterns of Teachers and Pupils by Years of Residential School Experience and by Type and Degree of Homogeneity of Response Patterns	202
XXXI. Differences in Value Orientation Patterns of Teachers, Male and Female Pupils by Type and Degree of Homogeneity of Response Patterns	204
XXXII. Differences in Value Orientation Patterns of Pupils and of Teachers by Years of Teacher Education by Type and Degree of Homogeneity of Response Patterns	206
XXXIII. Value Orientation Patterns of Pupils, All Teachers, and Teachers by Years of Teacher Education	207
XXXIV. Rank-ordering, Homogeneity of Response Patterns, and Ordering Distance of Treaty Pupils and Non-Treaty Pupils .	211

TABLE	PAGE
XXXV. Differences in Value Orientation Patterns of Treaty and Non-Treaty Pupils by Type and Degree of Homogeneity of Response Patterns	224
XXXVI. Rank-ordering, Homogeneity of Response Patterns, and Ordering Distance of United Kingdom Teachers and All Other Teachers . .	227
XXXVII. Differences in Value Orientations of United Kingdom Teachers and All Other Teachers by Type and Degree of Homogeneity of Response Patterns	239
XXXVIII. Rank-Ordering of Preferences of Parents, Pupils and Teachers for Differing Types of Classroom Discipline	241
XXXIX. Rank-ordering of Preferences of Parents and Pupils for Differing Methods of Learning English as a Second Language . .	243
XL. Number and Proportion of Levels of First Ten Occupations Named by Parents, Pupils, and Teachers	247
XLI. Total and Mean Number of Occupations Named by Parents, Pupils, and Teachers	247
XLII. Frequency of Choices in Pairs of Alternatives by Value Orientation Areas	341

CHAPTER I

INTRODUCTION

1. THE PROBLEM

Four hundred seventy-five years have passed since the commencement of permanent contact between the earlier settlers of North America --the Indians--and Europeans. For most of that period the contact between Indian and other North Americans has been largely unsatisfactory. Large numbers of persons of Indian ancestry live in enclaves sanctioned either by legislation or by tacit approval of the surrounding dominant white society. Efforts to "civilize" the Indian have met with limited success despite centuries of earnest effort by missionaries of various religious faiths, and by public educational services. Irritated by his own lack of success as an educator of Indians, the white man has often retreated to such rationalizations as stating that Indians cannot learn, or that they have no motivation to learn. Occasional atypical cases of Indians who have passed successfully through the white educational systems and become professional persons have merely served to complicate the issue.

Traditional difficulties in communication between white man and Indian have proven a formidable barrier in solving the problem of the relative ineffectiveness of the educational services provided for the Indian people. However, within the last generation, new tools have been employed to study the problem--the theory and methods of cultural anthropology, social psychology, and sociology. This study used an

approach drawn from these fields.

The purpose of the study was to investigate one area of culture, that of values and value orientations. The core of the study centred on the theory of dominant and variant value orientations proposed by Florence Kluckhohn. The method was that used by Kluckhohn and Strodtbeck in the Five Cultures Study of Values in New Mexico in 1950 and 1951.¹ Through the use of the Kluckhohn-Strodtbeck technique, it was hoped to identify the dominant and variant value orientation patterns of parents and pupils of Cree ancestry living in the forested areas of northern Alberta, together with those of the teachers and administrators in the major school system serving these communities.

The problem may be stated thus:

What are the patterns of value orientations, and the variations between patterns, of Indian and non-Indian individuals associated with the schools in isolated, northern Alberta Indian communities?

Several researchable sub-problems emerge from the main problem. The statement of these sub-problems follows after consideration of the significance of the study.

II. SIGNIFICANCE OF THE STUDY

Motivation to improve and extend educational services to culturally disadvantaged groups in society has increased greatly within the last twenty years. Holmes, writing in England, states, for example, that:

¹Florence Rockwood Kluckhohn and Fred L. Strodtbeck, *Variations in Value Orientations* (Evanston: Row, Peterson and Company, 1961).

Acceptance of education as a basic human right became one of the benefits promised to the masses in a post-war world in which imperialism was to be banished and all human rights respected.²

Bloom, Davis and Hess in the United States have suggested that "we are in the midst of such basic social change that it is appropriate to use the term 'revolution.'" One of the areas in the revolution they identify as:

. . . rising levels of aspiration of individuals and groups that have long been submerged or placed in marginal positions. These aspirations are for a larger share in the affluence of society and for the education which will make this possible. . .³

If expenditures on education can be assumed to indicate a concern for the aspirations of individuals or formerly submerged groups, Canada would appear to be taking part in Bloom's "social revolution." The total expenditures on education in Canada rose from 3.5 per cent of personal income in 1926 to 7.6 per cent in 1963. In current dollars, this means an increase from \$142 million to \$2,479 million.⁴ Expenditures on behalf of Indian education have shown enormous gains, particularly since the end of World War II, as shown in Table I.

²Brian Holmes, "Organization of Teacher Training," *Yearbook of Education*, 1963 (London: Evans Brothers Limited, 1963), p. 121.

³Benjamin S. Bloom, Allison Davis and Robert Hess, *Compensatory Education for Cultural Deprivation* (New York: Holt, Rinehart and Winston, Inc., 1965), p. 2.

⁴Canadian School Trustees' Association, *A Brief to the Royal Commission on Taxation* ([n.p.]: Canadian School Trustees' Association, 1963), p. 36.

TABLE I

GOVERNMENT OF CANADA EXPENDITURES ON BEHALF OF INDIANS
SELECTED YEARS, 1868 - 1964[†]

Year	Indians, All Purposes	Indian Education
1868	Nil	Nil
1881	805,097	--
1921	2,553,879	1,112,409
1951	14,241,210	7,394,147
1964	55,597,007	31,291,882

[†]Source: *Canada Year Book and Annual Reports*, Indian Affairs Branch.

As important as the visible expenditures in dollars and cents, are the masked costs of social dependence when educational services do not produce citizens who can take their full place in society. At the present time, the Indian population falls largely into this category. Underachievement (by white standards) and early dropout mark the educational histories of pupils of Indian ancestry in all parts of Canada and the United States. Few of the children who commence school in kindergarten or Grade I successfully complete Grade IX. Fewer still successfully complete high school, and a very small number proceed to post-secondary education. Of the 50,549 Indian pupils in school in the 1962-63 school year, only 351 had proceeded beyond Grade XII. This represented a considerable increase over the figure of 142 in 1953-54.⁵

The occupational patterns and socio-economic status of a group of under-educated, culturally differentiated, dissatisfied youth in today's technological society are not difficult to picture. If these were "The Vanishing American" of several decades ago, the problem might be ignored, but today it cannot. The crude birth rate for Indians in 1921 was 26.9 per thousand population; in 1960, 41.9 per thousand. The crude death rates for the same years were 24.2 and 8.8 per thousand persons respectively. Life insurance companies now use general Canadian life expectancy tables for the Indian population. These demographic data

⁵The Canadian Association of School Superintendents and Inspectors, *The Education of Indian Children in Canada* (Toronto: The Ryerson Press, 1965), pp. 51, 59.

from Decore⁶ indicate that a rising birth rate, a greatly reduced death rate, and normal life expectancy make the situation of the Canadian Indian a matter of considerable importance in society.

Finally, the place of a minority group in a larger culture must be considered. If, as some claim, the Indian is in his present condition because of his own choice, the answer could be to let him flounder until he finds his own way out. The opposing position is that the dominant society has an obligation to initiate and continue discussions with the Indian in order to bring him information, and help him achieve his own insights about his situation in a more effective way than blind trial and error. Education is seen as a major tool in this process.

III. THE SUB-PROBLEMS

The major problem of the study is the question, "What are the patterns of value orientations, and the variation between patterns, of Indian and non-Indian individuals associated with the schools in isolated, northern Alberta communities?" From this statement of the problem a number of researchable sub-problems emerge. The following were included in this study:

1. What are the value orientations of Indian pupils, aged twelve and upwards, attending the schools in Northland School Division #61?

⁶Anne Marie Decore, "Demographic Characteristics of Canadian Indians," *Variables*, V (Spring, 1966), 15-20.

2. What are the value orientations of parents of Indian ancestry residing within the districts served by Northland School Division #61?
3. What are the value orientations of teachers and administrators in Northland School Division #61?
4. What variations in value orientations exist between pupils aged twelve years and upwards and parents of Indian ancestry in Northland School Division #61?
5. What variations in value orientations exist between parents and teachers and administrators in Northland School Division #61?
6. What variations in value orientations exist between pupils aged twelve years and upwards and teachers and administrators in Northland School Division #61?
7. What variations in value orientations exist within the teacher and administrator sample?
8. What variations in value orientations exist within the pupil sample?

IV. DELIMITATION OF THE STUDY

1. The study was confined to that portion of Alberta served by Northland School Division #61. It does not include the settled agricultural region known locally as the "Peace River Country," bounded roughly by the towns of McLennan, Peace River, Fairview, and the City of Grande Prairie, but rather, the largely unsettled, undeveloped, forest-and-muskeg

area containing the Indian communities served by Northland School Division. The Division has no legally defined boundaries, but is considered to include the area bounded on the north by the 60th parallel of latitude; on the west by the Mackenzie Highway and the Peace River; on the south by Lesser Slave Lake and the 55th parallel of latitude; and on the east by the Alberta-Saskatchewan border.

2. The study was conducted among the Cree Indians in the Division, although it is recognized that a small group of Chipewyan Indians live in the north-eastern portion of the Division.

3. The study was concerned only with Indian people living in the isolated, forested areas of northern Alberta, thus excluding those living on the fringes of the towns on the periphery of the Division. For purposes of the study, both Treaty and Metis individuals were considered "Indians."

4. No pupils attending schools outside Northland School Division #61 were included in the sample.

5. The implications drawn from the study refer only to educational programs for Indian pupils or parents, and not to economic, community development, recreation or health programs.

V. LIMITATIONS OF THE STUDY

1. The degree of isolation of the Indian communities in Northland School Division has wide variations, and this may have a differential effect upon value orientations. Inferences that may be valid, for example, for Wabasca,

may be less valid for Grouard or Fishing Lake. Caution is therefore indicated in the interpretation and extrapolation of findings.

2. The value orientations of the teachers and administrators included in this study may be influenced by the presence in the sample of a group of approximately forty teachers recruiting in the United Kingdom in 1965, out of a total staff of 152 teachers and administrators. Caution is, therefore, indicated in making some types of inferences about teachers of Indian schools as a class.

3. The communication between the Indian people, especially parents, and the white man is often hindered by misunderstandings and mis-perceptions caused by linguistic differences between Cree and English. To reduce this effect local interpreters were drawn, where possible, from among persons who have shown an active interest in school affairs.

VI. ASSUMPTIONS

1. It was assumed that value orientations are a sufficiently stable phenomenon that a synchronic study will be useful for some considerable period of time.

2. It was assumed that the establishment of value orientation patterns of parents, pupils and teachers would provide important information for the development of curricula for schools serving pupils of Indian ancestry.

3. It was assumed that the elicitation of value orientations of parents and pupils required personal investigation rather than the mailing of questionnaires or dependence upon school personnel to administer instruments in group sessions.

VII. DEFINITIONS OF TERMS USED

Program. In this study, the term "program" is considered to include the sum of all the educational services offered by a school authority. As such, it includes all formal, curricular education extending from kindergarten through continuing education, together with all organized extracurricular activities authorized by the school system, such as sporting, recreational, or community relations activities.

Program Development. Program development is taken to mean the planned, systematic revisions and extensions of educational services required to meet the needs of the community served by an educational authority. It is understood that in this context it refers to the public education authorities who operate under the Department of Education of the Province of Alberta.

Indian. The term "Indian" as used in this study includes Treaty, Non-Treaty, and Metis.

Northern Alberta. In this study, Northern Alberta means that part of the province of Alberta, Canada, lying north of the 55th parallel of latitude in general, but more especially the territory served by Northland School Division #61, as described previously.⁷

VIII. ORGANIZATION OF THE THESIS

The next chapter presents the theoretical framework upon which

⁷*Supra*, p. 7.

the study was based. Chapter III contains a brief overview of the research literature on the acculturation and values of Indians, and of cross-cultural studies of values and value orientations. The research design of the study is the subject of Chapter IV. In Chapter V is found the report of the major findings of the study--the value orientation patterns of Indian parents and pupils, and of teachers and administrators in Northland School Division #61 in the school year 1965/66. Chapter VI is devoted to a detailed discussion of the differences in value orientation patterns of parents and pupils. Chapter VII deals with the differences in value orientation patterns of parents and teachers, while Chapter VIII explicates differences in value orientation patterns of pupils and teachers. Chapter IX presents the differences in value orientation patterns of Treaty and Non-Treaty pupils; of United Kingdom teachers recruited by Northland School Division in 1965 compared with those of all other teachers; and the general findings from the miscellaneous items--Item 23 (Types of Discipline), Item 25 (Occupations), and Item 26 (Learning English). The final chapter of the report provides a summary of the study, general conclusions, and implications of the findings for program development for schools serving pupils of Indian ancestry in Northern Alberta, together with implications for further research.

CHAPTER II

THEORETICAL FRAMEWORK

This chapter treats two major topics: concepts of value, and the Theory of Dominant and Variant Value Orientations of Florence Kluckhohn. The research design and the empirical work of the study were based upon an integration of theoretical constructs derived from these two areas of thought.

I. CONCEPTS OF VALUE

The meaning of "value" has been the concern of axiologists for many centuries. Its saliency has not been lessened in modern technological societies. Indeed, it has become increasingly important as man displays growing ability to tap sources of power and turn them either to constructive or destructive use. Lepley underlines this concern in these words:

Of issues basic for survival and co-operation, perhaps none are more important today than those concerning the nature and status of value in a world of scientific fact and force.¹

Widely divergent views are held by current philosophers on the meaning of "value" or "values." Moore suggests that values are indefinable, as is the term "good."² This is known as the "intuitionist" or

¹Ray Lepley, *The Language of Value* (New York: Columbia University Press, 1957), p. 3.

²Philip E. Jacob, James J. Flink, and Hedvah L. Schuchman, "Values and their Function in Decision-Making," *University of Pennsylvania Studies of Social Values and Public Policy* (Philadelphia: University of Pennsylvania, 1962), p. 17.

"common-sense" school, and its views have declined in popularity. Value is defined by Perry as "an object of interest," by Ayer as "an exclamation," and by Stevenson as "an exhortation to moral virtue."³ Dewey held that "immediate likings or emotive expressions present themselves as candidates for value status."⁴ He does not differentiate between mere likings and those which make a claim upon our conduct. Dewey, consistent with his other philosophical positions, held that all values are empirical. Pepper takes a broad view when he avers that there is no distinction in value between purposive action which is biologically determined and that which is reflective of a normative process of evaluation.⁵ Dorothy Lee adds to the discussion of whether or not needs precede values by stating that needs are not basic but are derived from values which various cultures inculcate in their young.⁶

Lasswell and Kaplan assert that values are "a desired event--a goal event," in contrast to Angell's view of values as "lasting preferences for the way in which one's social world is structured and operated."⁷ Lasswell and Kaplan thus appear to ignore differences between values arising from internal drives and those arising from the sanctions of

³*loc. cit.*

⁴*Ibid.*, p. 18.

⁵Stephen C. Pepper, *The Sources of Values* (Berkeley: University of California Press, 1958), p. 39.

⁶Dorothy Lee, "Are Basic Needs Ultimate?" *Freedom and Culture* (Englewood Cliffs, N.J.: Prentice-Hall, 1959), p. 72.

⁷Jacob, Flink, and Schuchman, *op. cit.*, p. 20.

society. Von Wright, also one of the "preferential" school, believes that moral philosophers deal with three categories of concepts--normative, value-concepts, and anthropological. Normative he defines as those dealing with right, duty, command, and prohibition. Value-concepts are those dealing with the notions of betterness, while anthropological concepts are those discussing need and want, decision and choice, motive and action. Von Wright also points out that "value-concepts seem to form 'triples' of two value-absolutes (at each end) and one value-absolute (between them). 'Good,' 'bad,' and 'better' are not the only examples."⁸

Ruesch gives a descriptive definition of the use of values in these words,

Man uses the process of valuation to bring order into randomness, to resolve conflict, to connect expectations and memories of past events with actual and ongoing behavior, and to compare on a unitary scale that which is otherwise incomparable.⁹

Distinction Between Attitudes, Beliefs, and Values

Considerable divergence and overlapping of categories in the presentations of various writers is noted in the values-attitudes-beliefs configuration. Clyde Kluckhohn describes the situation in these words:

⁸George Henrik von Wright, *The Logic of Preference* (Edinburgh: Edinburgh University Press, 1963), p. 10.

⁹Jurgen Ruesch, "Values and the Process of Communication," *Symposium on Preventive and Social Psychiatry* (Washington: Walter Reed Army Institute of Research, 1957), p. 27.

Reading the voluminous and often vague and diffuse literature on the subject in the various fields of learning, one finds values considered as attitudes, motivations, objects, measurable quantities, substantive areas of behavior, affect-laden customs or traditions, and relationships such as those between individuals, groups, objects, events. The only general agreement is that values somehow have to do with normative as opposed to existential propositions.¹⁰

An example of one of the alternative formulations welding values, attitudes, motives, and drives into one hierarchy is found in the formulation of Newcomb, Turner, and Converse.¹¹ At the bottom of the hierarchy lie drives, or states of the organism that initiate a tendency toward a general activity. Drives energize motives, which are learned, goal-directed states of the organism. Motives, in turn, create attitudes, defined as generalized states of readiness for motivated behavior. From attitudes spring values, which are deemed to be extremely inclusive goals around which many attitude patterns may be organized.

In contrast to Newcomb's presentation, Gordon Allport presents a classic definition of an attitude as:

. . . a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.¹²

¹⁰Clyde Kluckhohn, "Values and Value Orientations in the Theory of Action: An Exploration in Definition and Classification," *Toward a General Theory of Action*, Talcott Parsons and Edward A. Shils, editors (New York: Harper and Row, 1951), p. 390.

¹¹Theodore M. Newcomb, Ralph H. Turner, and Philip E. Converse, *Social Psychology* (New York: Holt, Rinehart, and Winston, Inc., 1965), p. 45.

¹²Cited by Clyde Kluckhohn, *op. cit.*, p. 423.

Murray gives a more concise definition when he suggests that man's personality is a system of integrated attitudes, "each of which is a relatively permanent disposition to evaluate some entity negatively or positively."¹³ Such a proposition telescopes the meanings of "attitude" and "value" into a unified whole.

In discussing the meaning of the term "belief," Parsons suggests that beliefs are always existential propositions.¹⁴ This appears to be the result, in Parsons' thinking, of the processes of an individual's perception and cognition. It does not necessarily imply a commitment to action, nor the concurrent existence of feelings about the belief. Both of the latter are necessary conditions attached to the definition of value.

To attempt to summarize this most complex topic, Clyde Kluckhohn's various statements on the matter can be paraphrased to provide some clarity of definition of attitudes, beliefs, and values, as far as this study is concerned.

Attitudes, following Allport, are considered to be a state of readiness to respond, refer exclusively to the individual, not the object, and exclude imputations of the desirable. *Beliefs* are considered to be those phenomena which are accepted by the individual as real or possible, true or false, correct or incorrect. Beliefs do not necessarily include

¹³Henry A. Murray, "Toward a Classification of Interaction," *Toward a General Theory of Action*, p. 453.

¹⁴Talcott Parsons and Edward A. Shils, (editors), *Toward a General Theory of Action* (New York: Harper and Row, 1962), p. 162.

feelings or commitment to action. *Values* are distinguished from beliefs and attitudes by the inclusion of the concept of "betterness" and of commitment to action.

Classification of Values

Morris, C. Kluckhohn, and Ruesch are among the authorities who have attempted to classify values. Charles Morris has suggested a classification of values at a high level of generalization.^{15,16} He divides values into three broad categories: operative values, conceived values, and object values. Operative values are actual, expressed preferences for one kind of object rather than another. Conceived values are those preferences guided by anticipation or foresight of outcome. Object values identify what is actually preferable or desirable for the individual, rather than what he actually prefers or believes desirable in view of anticipated outcomes. Clearly, conflicts can arise between these differing types of values, as Morris suggests.

Clyde Kluckhohn has attempted to formulate the "dimensions of values," in a rather lengthy statement.¹⁷ His main points may be summarized briefly as follows:

The *modality* of values may be either positive or negative. The *content* of values may be aesthetic, cognitive, or moral. In terms of *intent*, values may be "mode" (according to an approved style), "instru-

¹⁵Charles Morris, *Signification and Significance* (Cambridge, Mass.: The M.I.T. Press, Massachusetts Institute of Technology, 1964), pp. 19-20.

¹⁶_____ *Varieties of Human Value* (Chicago: University of Chicago Press, 1956), pp. 9-12.

¹⁷Clyde Kluckhohn, *op. cit.*, pp. 412-21.

mental," (means to further ends), or "goal" (aims and virtues which society makes for itself). Under the rubric *generality*, some values may be considered specific, relating to a certain situation in a certain culture. Others may be thematic, relating to diverse areas of a culture. Kluckhohn cites in supporting this the Navaho fear of closure, which runs like a thread through many diverse activities of life, such as basket-weaving and the sharing of knowledge between friends. Values have *intensity*; some may be of the categorical "must" type; some, the permissive "may" type; some, the "hypothetical" or lip-service type; "traditionalistic," lacking feeling; or "central" or "peripheral" to life. In terms of *explicitness*, values may be explicitly stated by the actor, or implicit in behavior. The *extent* of the holding of values may be either idiosyncratic (held by one person) or universal, as a member of the human race. *Organization* of values may be noted in the formation of value hierarchies, or priorities. They may also be isolated, neither supporting nor conflicting with other values, or integrated as part of an interlocking network.

Although this "classification" of values might better be termed a series of observations upon the characteristics of values, it is a useful compendium for one method of analyzing findings from empirical investigation of values.

Ruesch, although he does not claim to be presenting a classification of values, does so, in effect, in his discussion of the various current definitions of values. He suggests that four major types of values are found in any culture:

1. That which is identified with preferential behavior
2. That which refers to anticipatory behavior, to that which is esteemed or desired
3. That which is associated with what is deemed appropriate or efficacious for a certain purpose
4. That which is identified with the price of an object or action.¹⁸

This succinct statement appears to include in manageable form the majority of the ideas expressed throughout this discussion of the meaning of values.

In this study, the operational definition of Jacob, Flink, and Schuchman is accepted. They suggest that values are:

. . . the normative standards by which human beings are influenced in their choice among the alternative courses of action which they perceive.¹⁹

III. THEORY OF DOMINANT AND VARIANT VALUE ORIENTATIONS--F. KLUCKHOHN

Florence Kluckhohn has presented a theory of dominant and variant value orientations, and in doing so, acknowledges her debt to the thinking of Parsons, Stouffer, Redfield, Clyde Kluckhohn, and others. The theory has been discussed in several sources, and the presentation

¹⁸Ruesch, *op. cit.*, p. 27.

¹⁹Jacob, Flink, and Schuchman, *op. cit.*, p. 10.

here draws upon these sources.^{20,21,22,23}

Kluckhohn suggests that basic values may be considered "the central core of meanings" in any culture, similar to Benedict's "unconscious canons of choice," Sapir's "unconscious systems of meanings," Clyde Kluckhohn's "configurations," Opler's "culture themes," Thompson's "core culture," and Redfield's "world view." Finally, Kluckhohn suggests that Bateson's presentation of the process of establishing value orientations is helpful in understanding the concept of the value orientations themselves. Bateson claims that:

The human individual is endlessly simplifying, organizing and generalizing his own view of his own environment; he constantly imposes on this environment his own constructions and meanings; these constructions and meanings are characteristic of one culture as over against another.²⁴

²⁰Florence Rockwood Kluckhohn, "Dominant and Substitute Profiles of Cultural Orientation: Their Significance for the Analysis of Social Stratification," *Social Forces*, XXVIII (May, 1950), 376-93.

²¹Florence Rockwood Kluckhohn, "Dominant and Variant Value Orientations," *Personality in Nature, Society and Culture*, Clyde Kluckhohn and Henry A. Murray, editors (New York: Alfred A. Knopf, 1956), pp. 342-57.

²²Florence Rockwood Kluckhohn, "Value Orientations," *Toward a Unified Theory of Human Behavior*, Roy R. Grinker, editor ([n.p.]: Basic Books, Inc., 1956), pp. 83-93.

²³Florence Rockwood Kluckhohn, "A Method for Eliciting Value Orientations," *Anthropological Linguistics* II (February, 1960), 1-23.

²⁴Gregory Bateson, "Cultural Determinants of Personality," *Personality and the Behavior Disorders*, J. McV. Hunt, editor (New York: Ronald Press, 1944), Vol. II, p. 273, cited by Kluckhohn and Strodtbeck, *op. cit.*, p. 2.

From this global view of values, the Kluckhohn theory moves to the narrower base of "value orientation." This may be defined as: ". . . a generalized and organized principle concerning basic human problems which pervasively and profoundly influences man's behavior."²⁵ Narrowing further, Kluckhohn presents the operational definition of value orientations which is the basis of the theory and subsequent empirical testing:

Value orientations are complex but definitely patterned (rank-ordered) principles, resulting from the transactional interplay of three analytically distinguishable elements in the evaluative process--the cognitive, the affective and the directive elements-- which give order and direction to the ever-flowing stream of human acts and thoughts as these relate to the solution of "common human problems."²⁶

The Kluckhohn theory of dominant and variant value orientations rests upon three assumptions. The first of these is that all people in all cultures meet a limited number of human problems for which solutions must be found. Kluckhohn terms these the "common human problems." The second basic assumption is that the solutions to these common human problems are not limitless nor random, but fall within a limited range of "*positions*." The third basic assumption in the Kluckhohn theory is that the solutions are not mutually exclusive. The alternatives of all solutions are present to some degree in all societies, but are differentially preferred, thus producing not only dominant value orientation profiles, but numerous variant or substitute profiles. The alternative

²⁵Kluckhohn and Strodtbeck, *op. cit.*, p. 38.

²⁶*Ibid.*, p. 4.

solutions to the common human problems are rank-ordered by every society. Societies undergoing change will be found to lack clear-cut rank-orderings in some, or even all, of the possible value orientation positions. Finally, Kluckhohn repeatedly stresses the importance of the variant profiles, claiming that the practice of sociologists of describing societies solely in terms of dominant orientations has led to many over-simplified pictures of nations and of smaller groups of human beings.

In Table II the common human problems are set forth in the form of questions. To the right of each question in the table is presented the Value Orientation Area which describes the nature of the problem. The use of the term "Value Orientation Area" follows Caudill²⁷ rather than Kluckhohn, who uses the term "value orientation" to describe both the problem and the rank-ordered solution.

In each of the value orientation areas Kluckhohn holds that there are three choices or positions, each of which represents a possible solution to the problem. The position which is held most strongly by an individual or a culture is said to be the dominant or first-order position. The next best solution is termed a second-order position or variant, and the least preferred, a third-order variant. The names of these possible positions within each value orientation area are set forth in Table III. Kluckhohn implies, but does not state directly, that the three positions in each area form a continuum.

²⁷William Caudill and Harry A. Scarr, "Japanese Value Orientations and Culture Change," *Ethnology*, I (1962), 53-91.

TABLE II
COMMON HUMAN PROBLEMS AND VALUE ORIENTATION AREAS[†]

Problem	Value Orientation Area
1. What is the modality of man's relationship to other men?	Relational
2. What is the temporal focus of human life?	Time
3. What is the relation of man to nature and to supernature?	Man-Nature
4. What is the modality of human activity?	Activity
5. What is the character of innate human nature?	Human Nature ^{††}

[†] Adapted from Kluckhohn and Strodtbeck, *op. cit.*, p. 11.

^{††} Kluckhohn did not test the Human Nature Value orientation area in the Five Cultures Study due to the difficulty of creating valid items. No attempt was therefore made in this study to elicit value orientations in this area.

TABLE III

FIVE VALUE ORIENTATION AREAS AND THE RANGE OF
VALUE ORIENTATION POSITIONS POSSIBLE IN EACH [†]

Value Orientation Area	Range of Possible Value Orientation Positions		
Relational	Lineality	Collaterality	Individualism
Time	Past	Present	Future
Man-Nature	Subject-to-Nature	Harmony-with-Nature	Mastery-over-Nature
Activity	Being	Being-in-Becoming	Doing
Human Nature	Evil	Neutral or Mixture of Good and Evil	Good
	Mutable-Immutable	Mutable-Immutable	Mutable-Immutable

[†] Adapted from Kluckhohn and Strodtbeck, *op. cit.*, p. 12.

A description of the value orientation areas is necessary in order to appreciate fully the concepts that are being tapped by the questions in the instrument. The variations in value orientation positions will now be examined.

The Man-Nature Value Orientation Area

Three value orientation positions are advanced as possible solutions to the problem in the man-nature area: Subject-to-Nature, Harmony-with-Nature, and Mastery-over-Nature.

Subject-to-Nature Value Orientation. The familiar concept of fatalism best describes the Subject-to-Nature value orientation. It includes the idea of resigned acceptance of natural forces.

Harmony-with-Nature Value Orientation. This value orientation position implies no real separation of man, nature and super-nature. One is simply the extension of the other, and a concept of wholeness springs from their unity. It is not a familiar concept to some persons in Western cultures, who regard it as some sort of occult belief.

Mastery-over-Nature Value Orientation. The value orientation position of Mastery-over-Nature Value Orientation suggests strongly that natural forces of all kinds are to be overcome and put to the use of mankind. Bridges are built, mountains tunnelled, pipelines thrust across continents, satellites hurled into space. Man-made medical care for the control and prevention of disease and for the lengthening of life is believed in very emphatically. Man's duty is to overcome obstacles. A strong relationship is observed between industrialized societies and the holding of a Mastery-over-Nature value orientation.

The Time Value Orientation Area

Three positions in the Time area are noted as the familiar Past, Present, and Future orientations, easily understood in our linear-time culture. Worth remembering is the fact that some cultures, such as the Hopi, have no tense in their language, and live in an ever-moving present. Nevertheless, the Kluckhohn theory holds that different cultures will have varying positions on the Past-Present-Future dimension. Kluckhohn emphasizes that far too little attention has been paid by behavioral scientists to the full range of variations in the time area. It has been easy, for example, in discussing rural and urban people, to state that rural people have no idea of time and don't need one, whereas urban people must and do have such a sense.

Past Orientation. Those cultures which look to the past for their meanings and values are said to be Past oriented.

Present Orientation. Present-oriented individuals and cultures look little to the past, and consider the future as uncertain and unpredictable. Kluckhohn cites the Spanish Americans as an example of a group with a present orientation. Speculation is proceeding at the present time concerning the possibility that middle-class American culture is moving rapidly towards a present orientation as a result of good wages and salaries and social security measures against old age and other hazards of life.

Future Orientation. North America is seen as one of the most strongly future-oriented regions in the world. The rags-to-riches theme is still deep in the warp and woof of American thought, although the

riches may now be symbolized in a senior position in a wealthy organization rather than the personal fortunes of past generations of tycoons. Being called "old-fashioned" is humiliating in North America, where new things are valued and sought after. There exists, however, a noticeable feeling that in all this, "the American way of life" must not be threatened by proposed changes. Kluckhohn suggests that this negates the belief that Americans are nonconformists. The type and degree of conformism must be carefully examined within the context of the time orientation.

The Activity Value Orientation Area

Kluckhohn's thinking has gone through a number of clearly defined stages in developing this part of the theory. At one time it was called "Personality," and later "Valued Personality Type." It, too, divides into a "triple": Being, Being-in-Becoming, and Doing. The history of the Being and the Being-in-Becoming concepts dates far back in philosophical thought. Kluckhohn suggests that her three categories bear a relationship to Charles Morris' typology of "Dionysian," "Appolonian," and "Promethean."²⁸ The Dionysian category is one in which there is the release and indulgence of existing desires; the Appolonian is given to containment and control of desires by detachment and mediation; the Promethean is composed of those who strive actively.

Being Orientation. The Being orientation implies that the individual prefers the kind of activity which is the spontaneous expression

²⁸Morris, *Varieties of Human Value*, pp. 2, 3.

of that which is conceived to be "given" in the personality. It does not imply license, but neither is it developmental. The Mexican *fiesta* is cited as an example of the Being orientation.

Being-in-Becoming Orientation. In the Being-in-Becoming concept, the individual has a strong desire to develop all aspects of the self as an integrated whole. There is concern with "is-ness," in that the person wishes to develop what he *is*, but he has little desire to demonstrate what he can *do*. Kluckhohn suggests that this orientation is one which Americans ascribe to women, who are traditionally supposed to be interested in aesthetic endeavors and the development of children's personalities.

Doing Orientation. The crux of the Doing orientation is the evaluation of one's activities in terms of standards outside the person himself. Students must write external examinations, workmen meet quotas, athletes break existing records in time or distance or score, businessmen accumulate higher profits, industry makes better vehicles, governments build better spacecraft.

The Relational Value Orientation Area

The three positions in the Relational Area are Lineality, Col-laterality, and Individualism. Sociology has long had traditional dichotomies in this field of investigation. Tönnies speaks of Gemeinschaft-Gessellschaft, Weber of traditional-rational-legal societies, Durkheim of mechanic-organic solidarity, Redfield of the peasant-urban continuum. While the theory under discussion draws upon these sources, it has distinctive analytical differences. Kluckhohn points out that the trichotomy

Lineality-Collaterality-Individualism is capable of discriminating both within and between systems rather than providing tools only for discerning gross differences between systems.

Lineality Orientation. The primacy of group goals which are continuous through time, as in hereditary and kinship structures, are central in the Lineality orientation. Aristocracies typify this thinking. Continuity of the group through time, and ordered positional succession within the group, are key concepts in lineality. Kitchen has raised the issue of lineality as a function of bureaucratic organizations, and subdivides Kluckhohn's Lineality into "Intergenerational Lineality" and "Bureaucratic Lineality."²⁹ Those holding a Bureaucratic Lineality value orientation give their loyalty to organizational rather than kinship or hereditary goals.

Collaterality Orientation. A Collateral orientation calls for primacy of the goals and welfare of the laterally-extended group. The possibility of discontinuity in group allegiance is present, as each group is moderately independent of the others. Some individual and lineal goals may be held, but the general orientation is to the group. An example of such a dominant orientation is found in what Clyde Kluckhohn terms a Navaho "outfit," a laterally extended family group, loosely articulated.

²⁹Hubert W. Kitchen, "Relationships Between the Value Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups" (unpublished doctoral dissertation, University of Alberta, Edmonton, 1966), pp. 74-76.

Individualism Orientation. The individualistic orientation is the familiar one in American occupations. Individual goals have primacy over Lineal or Collateral goals. The person will willingly move away from his family across half a continent if the opportunities there are better. Loyalty to an organization, especially of persons with highly specialized professional skills, is usually not strong. While it is expected that such an individual will subordinate his personal goals, to an extent, to those of the organization employing him, and will co-operate with fellow employees, he does not feel called upon to remain loyal in an employment situation which has become distasteful to him.

Related Facets of the Kluckhohn Model

In addition to the specific value orientation positions postulated in the theory, and their general relationship to the common human problems, Kluckhohn suggests a number of related but vital facets of the total theory. In this section these key concepts are drawn together from the various sources in which they appear.

Self-Awareness of Value Orientations. Kluckhohn departs from the concepts of value orientations as being "unconscious," and posits that they fall upon an explicit-implicit continuum as far as different human beings are concerned. Some individuals have clear-cut, readily verbalized value-orientations. Others may be unaware of the existence of such directive forces, and be completely unable to express themselves in this area of thought.

Directiveness of Value-Orientations. Kluckhohn holds firmly to

the position that value orientations are directive. The cognitive and affective elements of the process give content and normative assumptions to the system, but it is the directive elements which mobilize and commit the person to action.

The directive element is a "biologically-determined predisposition,"³⁰ which gives order to the content, and aids in the selection of value systems from among many alternatives. In this Kluckhohn follows the biologist, Tinbergen, and devotes considerable attention to the rather pivotal difference between the biological instincts motivating the actions of non-human living creatures, and the physiological forces which play upon cognitive and affective domains in the human. In developing this concept, emphasis is placed on the transactional nature of the working of the three elements. Although they are "analytically distinguishable," in operation they interact in a most complex manner.³¹

Behavior Spheres. Kluckhohn's theory places great emphasis upon the notion that human beings do not hold to a single value orientation in all spheres of life. The obvious difference is noted between the individualism of the occupational sphere and the collaterality of the recreational sphere in Western civilization. Kluckhohn tentatively identifies the following "behavior spheres" in her theory: (1) economic-occupational, (2) religious, (3) intellectual-aesthetic, (4) recreational, (5) political, and (6) familial. A close resemblance to the term

³⁰Kluckhohn and Strodtbeck, *op. cit.*, p. 7.

³¹*Ibid.*, p. 9.

"institutions" as used by sociologists, is acknowledged by the author.³²

Required and Permitted Variations. Considerable space is devoted by Kluckhohn to the discussion of conformism. Apparently somewhat distressed by the impact of Riesman³³ and Whyte,³⁴ Kluckhohn emphasizes that conformism is not necessarily all bad, for without a considerable degree of uniformity of behavior and of values, society would be unpredictable and unworkable. However, within this framework, Kluckhohn makes clear that variations in value orientations are both permitted and *required* by all societies. Without such variations, society would lack persons willing to devote themselves to esoteric pursuits, for example, in the arts or in intellectual endeavors, especially in an industrial society.

Role Theory and Value Orientations. Kluckhohn points out the extreme usefulness of the concept of role, used as it is by sociologists, social psychologists, anthropologists, clinical psychologists, and psychiatrists.³⁵ Brushing aside the objections that the concept is too narrow and limiting for anthropology, Kluckhohn notes that Stouffer, and Gross, Mason and McEachern, in their study of the school superintendents, stress the need for consideration of variations

³²*Ibid.*, p. 28.

³³David Riesman, Nathan Glazer, and Reuel Denney, *The Lonely Crowd* (Garden City, N.Y.: Doubleday and Company, 1953).

³⁴William H. Whyte, Jr., *The Organization Man* (New York: Simon and Schuster, 1956).

³⁵Kluckhohn and Strodbeck, *op. cit.*, p. 33.

in social roles.³⁶ This, of course, is close to the concept of permitted and required variations in value orientations. It may well be, it is suggested, that the concept of role is a bridge between "cultural" and "social" forces. In summarizing the connection between role theory and value orientations, Kluckhohn suggests:

Roles, to the extent that they are determined by value orientations, are ordered into an interlocking network of the dominant and the variant for which the dominant rank ordering of value orientations is the integrating thread.³⁷

It is also suggested that the "deviant" individual could be considered as moving away from one role towards another. This captures the "going toward" half of the process, rather than the purely negative "moving away" portion. Rather than studying the deviant only as a person who has rejected or rebelled against a given role, it would be better to study his relationship to the new role network he has entered by the process of deviating from his original role. His preference for moving toward a new role may be the result of his own peculiar rank-ordering of values, or from conflict within his rank-order pattern.

Value Orientations and Cultural Change. Kluckhohn's observations on the relationship between value orientations and cultural change are highly relevant to this study. It is suggested that close examination must always be made of presumed cultural change, since occasionally more of the same thing is mistaken for a basic cultural shift. One of

³⁶*Ibid.*, p. 35.

³⁷*Ibid.*, p. 37.

the most important aspects of the process is that cultural change seldom occurs unless there is a reasonably sustained impact of one or more external forces upon a culture. This impact forces cultural interaction and internal variation. A second aspect of the process is the central place of homogeneity of values. Cultures which are ambivalent about their value orientations are ripe for change, whereas those which display homogeneity of orientations are much more difficult to change. The third pivotal feature in cultural change is the use of persons with already existing variant orientations as agents of change. In any culture, those who hold positions divergent from the dominant ones of that society will be the ones most receptive to the impact of another system.

Recapitulation of the Kluckhohn Model

A liberal cultural relativist, Florence Kluckhohn holds that there is systematic variation in the realm of cultural phenomena which is definite and essential. These variations are both permitted and required in every culture in order to ensure the continuation of their culture in the various behavior spheres of life.

One method of assessing the variations in culture is to examine the highly generalized principles known as value orientations. These arise, states Kluckhohn, from the necessity of answering five common human problems which cross all cultural boundaries, since they spring from the nature of human existence. The answers to the problems are not random nor limitless, but fall into definite, rank-ordered patterns of preferences. These value preferences, normative in nature, pro-

foundly influence the behavior of all individuals in all cultures as they choose among alternative courses of action presented to them.

The greatest emphasis is placed upon concurrent analysis of both dominant and variant value orientations, *as Kluckhohn holds that it is the total patterning rather than the dominant value orientation which creates distinctions between cultures. All orientations are present in all individuals at all times, to some degree, but are differentially rank-ordered.*

A close relationship exists between the varying roles in society and the variations in value orientations. Deviant individuals may be thought of as choosing to enter another role than that espoused by the dominant values of the culture. Those who choose such deviant roles may be innovators, the human resources for cultural change, or, alternatively, "criminal" elements.

Cultural change will come about most easily when a sustained impact from external forces is felt by a culture, especially a culture already ambivalent in its values. Greatest resistance to cultural change will be found where homogeneity of value orientations exists. The greater the degree of congruence between the value orientations in the relational area of two cultures in contact, the greater the ease of cultural change. Support in the relational value orientation area serves as a buffer to the cultural shock of change.

IV. SUMMARY AND IMPLICATIONS FOR THE PRESENT STUDY

Chapter II has presented the two major elements of the theoretical base upon which this study was founded:

1. Concepts of value and values
2. The Theory of Dominant and Variant Value Orientations of Florence Kluckhohn

The central thought of these two elements will now be touched upon briefly, together with their implications for the present study.

The philosophical base upon which the study rests is the concept of values as normative standards which influence the selection of alternatives of action. The establishment of a value structure occurs as part of the process of enculturation, in which, through formal or informal education, or both, the individual learns the content of his culture. Immediately, under this rubric, the school curriculum becomes important in the context of values. Applying to Indian education this concept of the relationship between values and the curriculum, it is interesting to note that the dominant white society has stated many times that one of its goals was to "civilize" the Indian. White values were assumed to be superior to Indian values, with the corollary that the white society had an obligation to change the values of the Indian. That the Indian culture has shown a remarkable resistance to attempts to change its values indicates that a need exists to study white and Indian values. By so doing, evidence may yet be produced which will assist in identifying the cause of the slow acculturation of the Indian.

The second central thought in this chapter was the Theory of Dominant and Variant Value Orientations proposed by Florence Kluckhohn. It was noted that this theory, springing from Parsons' General Theory of Action, has proven useful in cross-cultural studies of values, pro-

viding an operational framework for comparing differences in cultural systems.

CHAPTER III

REVIEW OF RESEARCH LITERATURE

In this chapter there is an examination of the problem in the light of related research literature. Evidence from outside the field of education is cited where the findings have pertinence for this study. In general, the literature reviewed consisted of systematic studies of Indian education, Indian values, and of studies which have used the Kluckhohn theory and method in cross-cultural testing of value orientation patterns.

A large body of literature concerning Indians in general was not reviewed, especially that containing the anecdotal accounts of missionaries, traders, or others having had extensive contact with the Canadian Indian. Some references will be found to those sections of general studies which have relevance to the educational problems in Indian schools and communities.

I. EDUCATION-CENTRED STUDIES

That the problems of Indian education have been a challenge to professional educators in North America may be deduced from the number of studies which have been carried out within the last twenty years. All appear to focus, in one way or another, upon the question, "Why do Indian pupils achieve less well than non-Indian children, and how much lower is their achievement by standardized measures?" Since this study was directed towards the examination of the value orientation patterns of the major participants in educational services in a northern Indian community,

a review of the literature on studies of educational programs for Indian pupils in other settings would seem particularly relevant.

Studies of Educational Programs for Indian Schools

During the school year 1936/37, Pedro Orata conducted an unusual program of "fundamental education" in Little Wound Day School in the Pine Ridge Reserve of South Dakota.¹ The work was not widely known until the publication of his report in 1953. The project had as its goal assisting the Indian people of the Pine Ridge Reserve to support themselves and manage their own affairs.

Orata's program had five objectives: fostering economic independence, self-government, better housing, better health, and the preservation of the native culture. The program centered in the school, and was planned co-operatively by staff, parents, and pupils. The core of the program was a month-by-month special study, focussed upon the regular seasonal events of the community, together with the needs as seen by Orata and staff. The project is noteworthy in two respects. The first is that Orata went to Little Wound School after he had earned a doctorate and taught in a major American university. The second point is that many of the concepts he pioneered are being promoted again under the rubrics "adult education" or "community development."

A significant work in the history of education in Alaska is the

¹Pedro Orata, *Fundamental Education in an Amerindian Community* (Washington: Department of the Interior, Bureau of Indian Affairs, 1953).

work of Ray.² This study commenced in 1956 with an application for federal funds for a survey of the 155 schools in Alaska which served 8,800 children. The survey was carried out, and the familiar profile emerged--underachievement on standardized tests, non-supporting home background, age-grade retardation, correlation between age-grade retardation and early dropout, inappropriate curricular materials, lack of facilities for vocational education at the post-secondary level, unqualified teachers.³ The recommendations suggest special readiness programs for pupils with restricted backgrounds, specially-prepared instructional materials, in-service workshops for teachers, replacement of unqualified teachers; regional four-year high schools, together with cottage type housing for students living away from home; vocational training at the post-high school level. The final recommendation was for additional research into all areas of native education. The problem is encapsulated in Ray's final paragraph:

The problems faced by Alaskan natives are not racial problems but are cultural problems. Careful research in anthropology, education and sociology must, therefore, point the way toward the intelligent solution of problems faced by this culturally atypical group. Ignorance, misinformation, and inaccurate stereotypes must not be allowed to shape the future of Alaska's native population.⁴

A critical feature of Ray's work is his rejection of the written questionnaire in favor of the use of interview schedules with native

²Charles K. Ray, *A Program of Education for Alaskan Natives* (College: University of Alaska, 1959).

³*Ibid.*, pp. 270-72.

⁴*Ibid.*, p. 274.

community leaders. Ray claims that "the strengths of the described interview method over that of a written instrument are overwhelming."⁵

A second study in Alaska by Ray, Ryan, and Parker in 1962 examined Alaskan Native secondary school dropouts.⁶ The pinpointing of the dropout problem in the former study led to the investigation of its possible causes in the 1962 study. Mailed questionnaires followed by personal interviews with dropouts and parents in three widely-separated Alaskan villages, including one Tlingit settlement, revealed many conflicts in values between native and white society.

Referring to the Tlingit Indians, the authors suggest that the value conflicts could be described in terms of:

1. individualistic versus familial orientations,
2. egalitarianism versus outstanding achievement,
3. respect for the integrity of the individual,
4. present versus future time,
5. active mastery versus fatalism.

Under this classification, the investigators found the Tlingit to possess values emphasizing individualism, outstanding achievement, directiveness and control of children, future time, and active mastery of the environment.⁷

⁵*Ibid.*, p. 13.

⁶Charles K. Ray, Joan Ryan, and Seymour Parker, *Alaskan Native Secondary School Dropouts* (College, Alaska: University of Alaska, 1962), pp. 2-5.

⁷*Ibid.*, pp. 229-54.

The Ray, Ryan, and Parker study also revealed some new points of abrasion between the native and white cultures. Among these were: the need to communicate the objectives of education to parents and village leaders; the necessity for occupational pre-requisites and preparation programs to be given throughout the child's school career; the urgency of early diagnosis of health problems; reduction of the reliance upon standardized test results for promotions; examination of school rules and regulations for realism; careful selection of dormitory proctors; the establishment and keeping of cumulative records on each pupil.

Knill and Davis⁸ undertook to survey the educational services in northern Saskatchewan. Knill sought to discover what happens when a relatively advanced society takes its educational system into an under-developed region, and to suggest some perspectives. Four areas were investigated; the historical development of provincially-sponsored education in Northern Saskatchewan; indices of student failure in 1962; characteristics and opinions of the teaching force in Northern provincial schools in 1961-62; and the job aspirations of northern pupils.

Recommendations for action by educational authorities were: increased availability of high school education; expansion of guidance services, vocational training and adult education; curriculum modification; improvement of teacher qualifications. To these recommendations was added the important suggestion that the Metis-Indian problem is

⁸William D. Knill and Arthur K. Davis, "Provincial Education in Northern Saskatchewan" ([n.p.]: W. D. Knill and A. K. Davis, 1963).

really one not for the Metis and Indian communities to solve, as they seem to be functioning successfully (by their own norms), but rather, one for the "Other Canada," the urban-industrial Canada of the dominant society. Knill and Davis see education as part of a problem which needs a combined operation, a national approach rather than a piecemeal provincial one. They conceive the process as being the establishment of new patterns of values and behavior for all citizens, rather than one Canada making the other over.

One of the most extensive studies in recent years conducted specifically in the field of Indian education is that of Wax, Wax, and Dumont.⁹ The setting investigated was that of the elementary day schools in the Pine Ridge Reservation of the Sioux Indians in South Dakota.

The Wax team studied the relatively low achievement of Indian pupils in the schools on the reserve. After eliminating some of the more commonly-advanced reasons for low achievement, the authors hypothesize that the most important issue in the problem would be the attitude of the parents and of their children towards acquisition of this "general American" knowledge.

In researching this problem, the investigators approached the main participants in education--teachers, pupils and parents. The study was oriented towards the testing of three general hypotheses, termed

⁹Murray L. Wax, Rosalie H. Wax, and Robert V. Dumont, Jr., "Formal Education in an American Indian Community," *Social Problems*, XI (Spring, 1964).

"theories" by the researchers. These can be paraphrased as follows: (1) cultural disharmony, (2) lack of motivation arising from an unappealing curriculum, and (3) preservation of identity. The first hypothesis suggests that cultural disharmony exists between Indian pupils and the schools. To the teacher, the Indian pupil is undisciplined, unmotivated, and often immoral. To the Indian pupil, the American school is painful, incomprehensible, and even immoral. The second hypothesis posits that the notions of the Indian people as to appropriate careers differ sharply from those of educators, thus causing school dropouts. The third hypothesis suggests that to the conservative Indian, preservation of his identity as an Indian is his last and most valuable treasure, and attempts to use education to change Indian pupils into "Whites" will likely be rejected.

The basic research technique employed was that of observation as a quasi-participant or full participant, supplemented by formal interviews. Forty-seven unstructured long interviews with Sioux parents were reported, together with forty-eight more interviews using a refined interview schedule. Twenty-two teachers were interviewed at length, ten using the interview schedule. Nineteen administrators were seen in unstructured interviews. Great pains were taken to interview a cross-section of young Sioux, both those still in school and those who had dropped out. One hundred seventy-three such young people were either interviewed or given a sentence-completion schedule. Seventy-two classes in sixteen schools were observed.

Results of the study are set forth in narrative style. Key con-

cepts are highlighted, and descriptive summaries and quotations from field notes given. In conclusion, the authors turn to their original hypotheses to summarize their findings. Leaving the first hypothesis for final consideration, they suggest that the second hypothesis is partially supported only, as there is evidence of considerable backing from Sioux parents for their children to proceed in school as far as they can. The third hypothesis, that of preservation of identity, is supported in a qualified manner by the reactions of the students and parents to becoming "less Indian." In discussing Hypothesis I concerning cultural disharmony, Wax and Wax contend strongly that Sioux children like school, and that the conflict is not between White and Indian values, but between the school and Indian peer society. In this connection the investigators make an analogy with slum schools in the urban setting catering to other ethnic minorities:

Given the abdication of their elders, and confronting teachers across a gulf of difference in age and culture, the slum pupils organize themselves into a cohesive society. The school campus provides an essential locus for their meetings and activities, but the values of the school personnel are seldom their values. . . . Thus, in a basic sense, the problems of the Pine Ridge Schools are not problems of "Indian education" so much as problems of "general education" in a society which requires the schools to be ethnic melting pots and ladders of social mobility.¹⁰

Studies of the Educational Achievement of Indian Pupils

Evidence already presented in narrative form suggests that Indian pupils do less well in school than do white children. This section examines some of the studies of actual achievement, measured by standardized

¹⁰*Ibid.*, p. 115.

instruments.

Peterson,¹¹ using a variety of tests such as the Iowa Every-Pupil, Gates Basic Reading, Pressey English, and a number of specially constructed tests of the U.S. Indian Service, surveyed 2,085 students in 1945 and 2,893 students in 1946, drawn from various types of Indian schools and from the rural public schools; 1,736 of the two groups were from the public schools. Peterson found that there was but little difference between Indian and non-Indian children in the rural public schools, but points out that the Indian pupils were not typical of those living on the reserves, nor are the norms for rural public schools as high as national norms. The study identified the following factors as affecting the academic achievement of Indian pupils: cultural background, education of parents, language spoken in the home, home stability, variety of schools attended, and regularity of attendance. A most interesting finding is that,

. . . the Indian student shows a remarkably higher degree of interest in the more academic type subject than most people would expect. Moreover, their expressed eagerness for more education and even for higher education certainly should be gratifying to those who are devoting their skill and time to furthering Indian education.¹²

As a follow-up to the Peterson study, the U.S. Bureau of Indian Affairs conducted a further study with the same tests under the direction

¹¹Shailer Peterson, *How Well are Indian Children Educated?* (Washington: Department of the Interior, United States Indian Service, 1948).

¹²*Ibid.*, p. 19.

of Anderson, Collister, and Ladd.¹³ In this close replication of the 1945 and 1946 study, Anderson found that Indian children achieved slightly lower than white children at the Grade VIII and Grade XII levels. In addition, a hierarchy of areas and types of schools emerged which gave clear direction encouraging administrative action towards integrating Indian education with the public schools. The final statement represents an optimistic way of reporting the poor achievement of Indian pupils:

. . . as the cultural and educational backgrounds of Indian children become more like those of white children in the public schools, the more closely will educational achievement of Indian children match that of white children.¹⁴

Ten years later, Lloyd¹⁵ administered California Tests of Mental Maturity and California Achievement tests to 4,176 non-Indian pupils and 188 Indian pupils in Grades 2, 4, 6, 8, and 10 in the Mesa Public Schools, Mesa, Arizona. In all tests he reports lower attainment for Indian pupils, with the exception of those Indian students who had attended Mesa Public Schools for their entire school career. This latter group gave some slight indication of higher intelligence and better achievement on some tests, but the results were not significant. The use of standardized tests with culturally differentiated groups has been severely

¹³Kenneth E. Anderson, E. Gordon Collister, and Carl E. Ladd, *The Educational Achievement of Indian Children* (Washington: Bureau of Indian Affairs, Department of the Interior, 1953).

¹⁴*Ibid.*, p. 79.

¹⁵David O. Lloyd, "Comparison of Standardized Test Results of Indian and Non-Indian in an Integrated School System," *Journal of American Indian Education*, I (June, 1961), 8-15.

criticized as a means of measuring innate capacity, but since the purpose of the Lloyd Study, as well as those of Peterson and Anderson, was to obtain a comparison of Indian and non-Indian pupils, the use of standardized tests can be defended.

The three studies reported in this section represent careful attempts to assess the actual achievement of Indian pupils in the school setting, with some comparisons possible between them and non-Indian pupils. Evidence from the studies adds support to the implications of consistent age-grade retardation reported in numerous places. It is reasonable, therefore, to generalize that in the educational services provided by white society, Indian pupils do less well than their non-Indian peers.

II. STUDIES OF INDIAN ACCULTURATION

Problems of the acculturation of the Slave Indians in the Mackenzie River area of the North West Territories in Canada have been documented by June Helm MacNeish¹⁶ following a fourteen-month stay in the upper reaches of the Mackenzie. MacNeish discusses the social organization of the Slaves. This organization is identified as quite simple, extending only to the biological family, the immediate settlement, and a few close kin in the region. It is an atomistic society, having little formal structure and imposing few expectations or requirements upon the individual. The tribes are highly egalitarian, disliking positions of responsibility

¹⁶June Helm MacNeish, "Problems of Acculturation and Livelihood in a Northern Indian Band," *Contributions à l'Etude des Sciences de l'Homme*, III (1956), 169-82.

or leadership. These two features combine to produce a people who feel themselves free agents, and for whom processes such as school discipline are alien.

Everybody is his own boss. . . . the individual protects his autonomy by a sort of emotional and social reserve, and he meets what he considers aggressive or infringing behavior either with blank-faced impassivity or by withdrawal and flight from the source of the unpleasant pressure.¹⁷

MacNeish points out that these Indians are greatly attracted to the products of the white society's technology, and view education for their children as a means to attain it. However, to the Indian, after the child has learned to read and write, he should obtain a technical education which is immediately practical. This is viewed by the parents as the quickest way to get a job and the goods which the earnings will buy. Although the suggestion may not be realistic, MacNeish proposes that this desire for consumer goods is a motivation upon which the schools should build.¹⁸

The carrier of European culture has traditionally found it most difficult to enter the mind and thoughtways of the North American Indian. An article bearing the title, "An Approach to the Mind of the Young Indian" is therefore of unusual interest to teachers in Indian schools. This study by Hoyt¹⁹ used a tested approach in the writing of essays by young Indian and non-Indian boys and girls aged 15-17 years.

¹⁷*Ibid.*, p. 176-77.

¹⁸*Ibid.*, p. 178.

¹⁹Elizabeth D. Hoyt, "An Approach to the Mind of the Young Indian," *Journal of American Indian Education*, I (June, 1961), 17-23.

Essays from 837 Indian pupils and 207 white pupils were analyzed. Many thought-provoking findings emerged concerning the views of the young Indian. The great majority possessed an almost overwhelming motivation to get a job, yet they displayed the utmost ignorance concerning the occupational world. Job plans were frequently interfered with by the young Indian's dependency needs, or by other members of the family. A strong desire for car ownership was almost universal. Finally, almost all respondents showed a strong desire for self-improvement. Hoyt dismisses the argument that children state in essays only what they think will please the teacher, by referring to essays written by native children in a United Fruit Company school. The responses of these children were almost exactly opposite to those that would have pleased the Company. A further 2,400 essays by pupils of twelve Indian tribes in the United States revealed many bitter children, and some who openly attacked the assignment as foolish. Used correctly, Hoyt's essay approach offers a technique worthy of further examination in the attempt to understand the Indian child.

Strong²⁰ studied the relationship between social class and levels of aspiration among Alberta Indian and Metis pupils and urban and rural non-Indian children, all at the junior and senior high level. Social class was obtained by ranking the father's occupation on the scale developed by the National Opinion Research Center to indicate prestige rankings.

²⁰Mary Symons Strong, "Social Class and Levels of Aspiration Among Selected Alberta High School Students," (unpublished Master's thesis, University of Alberta, Edmonton, 1963).

Pupils were given achievement value orientation tests in three dimensions: activistic-passivistic; individualistic-collective, and present-future, typologies first proposed by Rosen. French's "Twenty Statements" and "Name Occupations" tests were also administered.

Strong concluded that: (1) achievement orientation and levels of aspiration are highly related to social class, (2) a strong positive relationship exists between social class membership and possession of the implementary values necessary for achievement, between saliency of knowledge of occupations and the structure of society, and levels of education and occupational aspiration, (3) in all groups tested, social class was far more important as determinant of the need for achievement than was membership in religious bodies, community of residence, or in a racial or ethnic group--with the exception of membership in the Indian or Metis ethnic groups, where ethnicity was significantly related to achievement orientation scores, (4) the influence of the school was not sufficient to change class influence on orientations and aspirations tested.

In the critical field of parental influence upon pupils in their decision to drop out or remain in school, Zentner²¹ sampled parental behavior and student attitudes in Oregon and Alberta. Fifty-two Oregon Indians and 304 Oregon whites responded to the questionnaire, together

²¹Henry Zentner, "Parental Behavior and Student Attitudes Towards Further Training among Indian and Non-Indian Students in Oregon and Alberta," *The Alberta Journal of Educational Research* IX (March, 1963), 22-30.

with 115 Alberta Indians and 335 Alberta whites. The instrument asked direct questions such as, "How much pressure do your parents or guardians put on you to think about going to further training?" Zentner found that parental behavior which was positive and supportive influenced students' attitudes in a parallel direction. This finding supports the results of Parsons'²² study of behavior of slum parents in an urban setting. Parsons found that lack of parental support produced negative attitudes in children concerning the question of remaining in school.

Another facet of Zentner's findings is also of interest:

It was evident, therefore, that Indian students and their parents--judging from the perceptions of the students--were as interested and concerned about further training after high school as non-Indian students and their parents.²³

This strong future orientation is in sharp contrast to the generally accepted stereotype that the Indian people are present-oriented, as noted by Hirabayashi.²⁴ Zentner also reports significant differences between the attitudes of both Indian and white parents and pupils in Oregon and Alberta, and concludes that: "This finding strongly suggests that the rural and small-town culture of the U.S.A. lags behind that of Canada at the present time in the stress which it places upon further training after

²²Talcott Parsons, "The School Class as a Social System: Some of its Functions in American Society," *Harvard Educational Review* XXIX (Fall, 1959), 297-318.

²³Zentner, *op. cit.*, p. 29.

²⁴B. Y. Card, G. K. Hirabayashi, and Cecil French, *The Metis in Alberta Society* (Edmonton: University of Alberta Committee for Social Research, 1963), p. 380.

high school."²⁵

III. STUDIES OF VALUES AND VALUE ORIENTATIONS

Studies of Non-Indian Cultures

Many definitions of culture give values, or normative standards, a central place. Repeated references to the differences between Indian and non-Indian culture have been made in the literature reviewed up to this point. It would therefore seem appropriate to review studies of values as part of this chapter. Attention will be paid chiefly to recent reports of inquiries, both cross-cultural and intra-cultural, into value orientations.

In an international study of some magnitude conducted over a period of years commencing in 1948, Charles Morris²⁶ obtained data on his "Ways of Living" instrument from several thousand college students: 2,846 came from the United States, 743 from China, 1,134 from India, 307 from Japan, 224 from Norway, and 314 from Canada. The instrument consisted of thirteen paragraphs describing different basic approaches to life. Respondents were asked to indicate how much they liked or disliked each item, on a seven-point scale ranging from "I like it very much" to "I dislike it very much." Results were subjected to factor analysis. Five "Factors" were discovered among the thirteen "Ways" items:

²⁵Zentner, *op. cit.*, p. 30.

²⁶Charles Morris, *Varieties of Human Value* (Chicago: University of Chicago Press, 1956).

- A. social restraint and self control
- B. enjoyment and progress in action
- C. withdrawal and self-sufficiency
- D. receptivity and sympathetic concern
- E. self-indulgence (or sensuous enjoyment)

The Canadian sample most closely approximated that of the United States, with Canadians indicating a larger degree of social restraint and self control, and a smaller degree of enjoyment and progress in action. The Norway sample came next closest to the United States, although the choices were much more middle-of-the-road, with strong religious overtones evident in the narrative comments.

The Asiatic samples showed the greatest divergence from the United States-Canadian group. In the United States, "Way 7," indicating a strong preference for flexibility and many-sidedness while not forgetting contemplation and action, was given first place. This concept was given a much lower place in India and Japan. Indian students gave first place to the tradition-oriented way of restraint and self control, but second place to enjoyment and progress in action. Japanese students gave a higher score to withdrawal and self-sufficiency than all other groups, but were, on the whole, oriented towards persons and society rather than self. The China sample emphasized an actively and socially oriented mode of thought, but with some considerable strength for the traditional Chinese value of cultivation of the self.

In summarizing his findings globally, Morris suggests that the Asiatic groups are more tolerant of cultural diversity than are the

Western, which, however, are more tolerant of individual or psychological diversity than the Asiatic. Western students also emerge as more self-centered than their Asiatic counterparts, who are quite society-oriented. In spite of these differences, considerable agreement exists on the overall liking of many of the ways, and of the five Factors. Morris hypothesizes that the mere fact of the socialization of children produces some cross-cultural uniformities in values.

An interesting feature of Morris's report of the study is the extended treatment given to the four systems which he sees interacting to produce values. Going beyond Parsons, he states that cultural, social, personality, and biological systems are required to produce values. In a later book he summarized this view in these words:

These systems are regarded as irreducible subsystems of human action. In our terms, each has its own boundary-maintaining devices. In other words, neither psychology, sociology, anthropology nor human biology alone can give the whole account of human action, nor can any one of these disciplines be reduced to another.²⁷

The conceptual sweep of Morris's work, its international sampling, and its statistical treatment make it a most useful document in the history of the study of values by behavioral scientists.

Caudill and Scarr²⁸ present a report of their study of the value orientations of twelfth-grade Japanese students and their parents in the

²⁷Charles Morris, *Signification and Significance*, (Cambridge: The M.I.T. Press, Massachusetts Institute of Technology, 1964), p. 57.

²⁸William Caudill and Harry A. Scarr, "Japanese Value Orientations and Culture Change," *Ethnology*, I (1962), 53-91.

three communities of Ome, Chiba, and Fukugawa. The total stratified sample comprised 619 subjects. A modified Kluckhohn-Strodtbeck instrument was used, translated into Japanese for the Relational, Time, and Man-Nature value orientation areas of the Kluckhohn theory. The schedules were read to the students who also had a printed copy of them on their desks. Pupils also took home schedules to the parents, who completed them and returned them via their children.

In the Relational Value-Orientation Area Caudill discovered that the Japanese are highly collaterally oriented in family work relations and employer-employee relations, but individualistically oriented in situations involving personal misfortune and inheritance. Both these orientations reject the lineality which has historically been an important part of Japanese life. In the Time Value-Orientation Area, the authors discovered a mixture of Future and Present orientations, dichotomized along a technological versus emotional-philosophical-ceremonial axis. The Future orientation, however, also has considerable potency, though not first rank, in social activities. In the Man-Nature Value-Orientation Area, the Japanese display a strong preference for mastery over nature, with the major variant being harmony with nature.

Caudill and Scarr suggest that these findings reveal the rapid cultural change which is going on in the country, with an intricate blending of old and new value-orientations. Considerable weight is placed upon the rejection of the "either-or" philosophy of value-orientations. It is claimed that close attention must be paid to the unity of the dominant, major variant and minor variant orientations as a configuration

of relative rankings in an array of value orientations.

Another intra-cultural study using the Kluckhohn-Strodtbeck theory and method is that of Kitchen,²⁹ who sampled 2,132 pupils from 168 schools in Newfoundland, Canada, using a modified Kluckhohn instrument. Kitchen extended Kluckhohn's work by devising "Being-in-Becoming" positions within the man-nature value-orientation area. In addition, Kitchen devised five sub-scales under the Relational, Man-Nature, and Activity value orientation areas. The statistical procedures of the study followed Strodtbeck quite closely, thus making a number of assumptions concerning the distribution of the traits in the population, and of the independence of the variables, which might be difficult to support. Nevertheless, Kitchen's findings give further evidence of the usefulness of the Kluckhohn model in assessing intra-cultural variations. The study made certain predictions concerning value orientations, based on Redfield's peasant-urban continuum, which were powerfully supported. Strong relationships were found between value orientations and place of residence, degree of industrialization, television coverage, religious homogeneity, and proportion of persons engaged in fishing. The dominant value orientations of the pupils taken as an aggregate were Mastery-over-Nature, Doing, Collaterality, and Present Time. Lineality, Being-in-Becoming, Subject-to-Nature, and

²⁹Hubert Kitchen, "Relationships Between the Value Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups" (Unpublished doctoral dissertation, University of Alberta, Edmonton, 1966).

Future Time were next in importance, with Individualism, Being, Harmony-with-Nature, and Past Time least important.

The relationship between value orientations and role expectations of teachers and trustees in the northwestern United States was investigated by Seger,³⁰ using a modification of the Kluckhohn-Strodtbeck instrument and an instrument derived from the works of Gross, Mason, and McEachern.³¹

Seeger discovered that the difference in role expectations held for the school superintendent by teachers and school board members were related to the differences in value orientations of the school board members and teachers. Consensus in value orientations was found both in the teacher and trustee groups. Statistically significant differences were found chiefly in the Relational and Activity value orientation areas. The non-significant differences in the Time and Man-Nature areas were considered evidence of the integrative function of value orientations between the two groups. In the role expectation investigation, Seeger found that such do exist and vary among teachers and among school board members, and that differences exist between the two groups. The sizes of the differences between school board members and teachers in the two variables are related. A summary of Seeger's

³⁰John Edward Seeger, "Variations in Value Orientations and Differences in Role Expectations--a Relationship Within an Educational Context" (unpublished doctoral dissertation, University of Oregon, Eugene, Ore., 1965).

³¹Neal Gross, Ward Mason, and Alexander W. McEachern, *Explorations in Role Analysis* (New York: John Wiley and Sons, Inc., 1958).

findings on value orientations is set forth in Table IV.³²

TABLE IV.

VALUE ORIENTATIONS OF OREGON TEACHERS AND
SCHOOL BOARD MEMBERS

Teachers			
Time	Future	Past	Present
Relational	Individu- alistic	Collater- ality	Lineality
Man-Nature	Harmony- with	Subject- to	Mastery- over
Activity	Doing	Being	
School Board Members			
Time	Future	Present	equ. Past
Relational	Individu- alism	Collater- ality	Lineality
Man-Nature	Harmony- with	Subject- to	Mastery- over
Activity	Doing	Being	

³²Seeger, *op. cit.*, p. 147.

Studies of Values of Canadian Indians

Mention has already been made of the values of the Tlingit Indians in the discussion of studies of programs for Indian schools. Other studies of values of Canadian Indian peoples provide further useful background for this study. Among these is that of Honigmann.³³ Honigmann studied the James Bay Cree in northern Manitoba intensively, and suggests that they have both convergent and divergent values from Eurocanadians. He believes that both groups share the following beliefs:

1. A relatively similar conception of a universal order (God).
2. A conception of human nature as including powers of reflection, choice, or free will. In some degree every person above a very youthful age may be held responsible for his actions.
3. Repugnance for violence, theft, deceit, incest, and adultery.
4. Recognition of the desirability of working together.
5. The belief that Eurocanadian customs (including language) are, with certain exceptions, superior to those of the Indian.
6. A man's movable wealth (food, shelter, tools) are his own, free to be alienated under certain conditions.
7. Certain physiological processes are highly private in nature, especially urination, defecation, and menstruation. The genitals are to be carefully concealed as well as other areas of the torso.

³³John J. Honigmann, "Interpersonal Relations and Ideology in a Northern Canadian Community," *Social Forces*, XXV (May, 1957), 365-70.

Honigmann goes on to list those ideologies which are diverse but relatively complementary. These are:

Eurocanadian

Consciousness of a long cultural and social history . . .

Catholic ritual and teaching are of vital importance for saving the Indian's soul . . .

Fur is valuable.

The state of Indian health is deplorable but Eurocanadian culture contains very effective solutions for remedying this problem.

Rewards should be distributed in proportion to what a client produces or achieves . . .

The Indians are forced to live a hand-to-mouth existence which is regrettable, but constant vigilance must be exercised not to be exploited by natives' demands for help.

Indian

Little consciousness of history and only a vague awareness of other Indians . . .

It is doubtful if the Indian thinks about salvation in the same way as the missionary . . .

The things one can buy in the Company store are desirable to use and consume and to that end furs must be accumulated.

Illness is a great and constant threat in the face of which Indians are largely helpless, unaided. Eurocanadian culture, however, possesses effective cures and Eurocanadians promise relief from the anxiety attached to illness.

Strong interest exists in competing for excellence in technical activities and games. Success is appreciated but competition and success must not be publicly advertised.

A conception exists of living under severe poverty, dire threat to survival, and imminent danger of starvation. Certain assumptions follow about the necessity of being cared for by Eurocanadians, especially those with power and wealth.

Eurocanadian

Self-help is a cardinal virtue but acceptance of public assistance is a disgrace or "unhealthy".

When the yield of a productive task seems uncertain, effort should be intensified.

Property enhances the ego and has prestige value . . .

Eurocanadians are strongly future-oriented; planning is carried on compulsively and is rationalized as necessary.

Strong respect attaches to leadership, which is regarded as necessary, desirable, and inevitable.

Credit should be issued carefully with an eye out for such things as the individual's previous record . . .

Family allowance foods issued by the Government are intended for the welfare of children. It is wrong to serve such items to adults or dogs.

Indian

Self-help is a virtue but when public assistance is available it is wise and security-promoting to rely on it.

When the yield of a productive task is uncertain, effort should be discontinued.

With the exception of certain clothing, property is for use rather than display. It is not an extension of the ego.

The orientation is toward the present and there is little concern for the future.

Ambivalence characterizes thinking about leadership. Indians regard firm leadership as desirable, yet no pleasure comes from exercising power. Too great evidence of power is resented and feared by those whom it affects.

As large a "debt" as possible against winter earnings is desirable.

Food received in family allowances may properly be utilized for dogs, by parents, as well as for children.

Some of the above beliefs are highly specific and hardly to be classed as "values," yet implicit in them are assumptions about life's problems. Whether or not the values still hold in the manner set forth by Honigmann is debatable, particularly in view of the acceleration in the

rate of cultural exchange in the post-war period. The observations from which the above conclusions were drawn were made in 1947 and 1948. Further, it would be inappropriate to assume that if such are indeed the beliefs of the James Bay Crees, they must also be the beliefs of other Cree-speaking groups in the northern forested areas. Honigmann's discussion, however, is a useful one in a largely unexplored cultural field.

The use of pictures, either concrete or abstract, is now accepted as a valid technique in projective testing for deeply-held facets of human personality and belief systems. The Rorschach and Thematic Apperception Tests are examples of the technique, which holds that pictures often trigger responses and memories submerged in ordinary verbal or written investigations. George and Louise Spindler,³⁴ adapting Collier's photographic technique, have developed the Instrumental Activities Inventory, based upon the milieu and life of the Southern Alberta Blood Indians. The Spindlers assert that the Instrumental Activities Inventory will produce "specific, operational perceptions of social reality, organized normatively in a means-ends relationship."³⁵ For any individual, the most useful dimensions of social reality are structured into instrumental roles that prescribe activity related to specific and valued social goals. For the white man, the most significant instrumental

³⁴George Spindler and Louise Spindler, "Researching the Perception of Cultural Alternatives: The Instrumental Activities Inventory," *Context and Meaning in Cultural Anthropology* (New York: Free Press, 1965), pp. 312-37.

³⁵*Ibid.*, p. 316.

activities are those represented in the occupational structure, but for the Blood Indian the instrumental activities are not usually those associated with occupations.

Following a lengthy period of participant observation on the Blood Reserve, Spindler commissioned a talented Indian artist to draw pictures which would present consistent choices between alternate modes of action. These modes of action fell within the following cognitive orientations: autonomy, activity and health, pride in physical appearance and health, keeping traditional identity, tendency towards stereotypic thinking, immediacy and practicality, elite practicality, and literality. Spindler found that of the occupations portrayed in the pictures, one-third or more Blood Indian subjects ranked the first four preferred occupations in this order: mechanic; carpenter; farming, branding calves, and haying; calf-roping. Between one-third and one-sixth of the respondents ranked the occupations in this order: artist; doctor; office worker; bronc rider; chicken dancer; barber. Less than one-sixth ranked their preferences as follows: nurse; milking cows; politician; priest; oil rig worker; chief-maker; cook; medicine man; storekeeper; boxer; Indian-white marriage; bartender.

The obvious incongruities within these three groups of rankings of instrumental activities, by white taxonomies of "valued social goals," gives rise to many hypotheses concerning the nature of the values of the plains Indian. While it is unwise to generalize between the plains Indian culture and the forest Indian culture, many thought-processes of Indians as an ethnic group are held in common, and the questions raised

by the Spindlers are relevant to the study being reported here.

One of the most recent uses of the Kluckhohn instrument is that of the 1965 McGill-Cree project in northern Quebec, conducted by Pothier and Chance.³⁶ The purpose of the study, part of a long-range program, was to identify the changing values of the adults and school-age children of Indian descent who live at Mistassini Post or at the Residential School at La Tuque, Quebec, Canada. More broadly, the study sought to understand the trend towards acculturation among the Mistassini Indians in Western Quebec lying midway between Lac Ste-Jean and James Bay. A French version of the schedule was prepared, French being the second language of the Indian people of the area. The instrument was administered to thirty-six adult Indians, thirty-six Indian children of school age but under the age of sixteen, in Grades V, VI, and VII, and thirty white pupils in Grades VII and VIII. The adult sample was not randomly selected, having been picked from the parents of school-age children or by reason of friendship with the interpreter.

A very simple statistical procedure was employed in determining preferences for different value orientation positions. The first choices of the informants were counted. A difference of five or more was considered significant; less than five but more than two were considered a preference, but not a significant one; equal numbers of choices, or a difference of but one choice was identified as equality.

³⁶Roger Pothier et Norman A. Chance, "Etude des Orientations de Valeurs parmi les Indiens Mistassini du Quebec" (Montreal: Programme in the Anthropology of Development, McGill University, 1966). (Mimeographed.)

Rather mixed findings emerge. Using the terminology of the Kluckhohn model, the Activity value orientation area revealed the only clear-cut orientation, which was towards Doing rather than Being. This was true across all three groups.

In the Relational area, the adults preferred Lineality, with Collaterality not much removed. Individualism was rejected quite strongly. Indian pupils chose Collaterality, on the whole, although the older ones displayed a liking for Individualism. The white pupils also preferred Collaterality, although Individualism also was quite favored.

The Man-Nature value orientation area revealed great inconsistencies in preference among the Indian samples, but the white pupils showed a distinct preference for the Subject-to-Nature position, with Mastery-over-Nature and Harmony-with-Nature almost equal as second choices.

The Time area also yielded mixed findings among all three groups. The only stable generalization possible is that the Past orientation was rejected, with about equal preference given to Present and Future.

Pothier and Chance discuss at some length the possible causes of the lack of consensus among the Indian samples in all areas except Activity. Attention is paid to the influence of wage work, government agencies, traders, and the church. In sum, their position appears to be the same as that of Kluckhohn in discussing the findings on the Zuni Indians. A culture in transition, it is held, will display ambi-

valence in its value orientations. The Mistassini Indians have been subjected to increasingly strong pressures from the white society in the last few years, and are in a process of transition, hence the mixed findings.

It could be remarked that the sampling techniques, the relatively small size of the sample, and the apparent use of the sums of ranks alone as the indicators of preferences may contribute to the lack of homogeneity of preferences in the findings.

IV. SUMMARY

This chapter has been a review of three classes of literature, all of which have a direct bearing upon the problems of Indian education in northern Alberta at the present time. The research studies reviewed can be broadly classified as education-centred studies, studies in Indian acculturation, and studies of values and value orientations.

The education-centred studies reviewed indicated concern on the part of governmental authorities for the effectiveness of programs of Indian education. Studies from South Dakota, Alaska, and Saskatchewan, revealed the serious inadequacies in present educational services and the need for deeper understanding of Indian culture and cultural values. Studies by Peterson, Lloyd, and Anderson *et al.* revealed that on the whole, the educational achievement of Indian pupils, as measured by standardized tests, is lower than that of non-Indian pupils.

The acculturation studies reviewed gave considerable support to the hypothesis that the Indian people find difficulty in accepting white

norms and values. At the same time, it was shown that the modes of thinking of the young Indian are essentially sensitive and idealistic.

Studies of values and value orientations conducted by Morris, Caudill and Scarr, Kitchen, Seger, Honigmann, George and Louise Spindler, and Pothier and Chance, indicate that considerable attention is being paid to the investigation of cross-cultural and inter-group differences in value orientations. Distinctions were observed between Asiatic and Western cultures, and within cultural groups in North America. Studies of the Canadian Indian and non-Indian indicate both divergence and similarity in value orientation patterns between the cultural groups. The results of these various studies show that the behavioral sciences are developing strategies of inquiry for ordering data in a very complex field.

The review of research literature in this chapter illustrates the timeliness and feasibility of studying, with the aid of the Kluckhohn theory and method, the value orientations of Indian parents and adolescent Indian pupils, and of teachers and administrators in a northern Alberta school authority established to serve pupils of Indian ancestry.

CHAPTER IV

RESEARCH DESIGN

In this chapter the hypotheses of the study, the methodology used in testing them, the instrumentation, the pilot study, the sample, data collection, and the processing and analysis of data are discussed.

I. THE HYPOTHESES

The primary hypothesis of this study was that statistically significant differences in value orientation patterns exist between the three samples when grouped in pairs; parents and pupils, parents and teachers, pupils and teachers. Prior to stating the specific hypotheses concerning significant differences in *total value orientation patterns*, however, predictions are made concerning the *dominant value orientation preferences* of parents, pupils, and teachers and administrators. These predictions at the nominal level of measurement were not subjected to tests of statistical significance, and are found in Hypotheses 1, 2, and 3 as follows:

Hypothesis 1

The dominant value orientations of Indian parents will be:
Collaterality, Present, Harmony-with-Nature, Being.

Hypothesis 2

The dominant value orientations of adolescent Indian pupils will be: Collaterality, Present, Harmony-with-Nature, Being.

Hypothesis 3

The dominant value orientations of teachers and administrators will be: Individualism, Future, Mastery-over-Nature, Doing.

Predictions of statistically significant differences in *total value orientation patterns* are set forth in hypotheses 4 to 8 inclusive, together with predictions in sub-hypotheses 5.1, 6.1, 6.2, 6.3, and 6.4 concerning the relationships between value orientation patterns and certain criterion variables. These hypotheses and sub-hypotheses are:

Hypothesis 4:

Significant differences in value orientation patterns will exist between Indian parents and adolescent Indian pupils.

Hypothesis 5

Significant differences in value orientation patterns will exist between Indian parents and teachers and administrators.

Sub-hypothesis 5.1. The greater the number of years of teacher education possessed by the teacher or administrator, the greater the dissimilarity of his value orientation pattern to that of Indian parents.

Hypothesis 6

Significant differences in value orientation patterns will exist between adolescent Indian pupils and teachers and administrators.

Sub-hypothesis 6.1. The older the adolescent Indian pupil, the greater the similarity of his value orientation pattern to that of teachers and administrators.

Sub-hypothesis 6.2. The greater the number of years spent by the adolescent Indian pupil in residential schools during his lifetime, the greater the similarity of his value orientation pattern to that of teachers and administrators. This hypothesis is made on the basis that the development of value orientations may be considered to arise, in part, from the amount of time spent in contact with various reference groups. Since residential pupils have considerably more contact with teachers and administrators than do day pupils, the hypothesis was made in order to test the assumption that this additional contact does, in fact, tend to increase the congruence in value orientation patterns of residential pupils and teachers.

Sub-hypothesis 6.3. The value orientation pattern of female adolescent Indian pupils will reveal greater differences from that of teachers and administrators than will the pattern of male adolescent Indian pupils.

Sub-hypothesis 6.4. The greater the number of years of teacher education possessed by the teacher or administrator, the greater the dissimilarity of his pattern of value orientation to that of adolescent Indian pupils.

Hypothesis 7

No significant differences in value orientation patterns will exist between Treaty Indian pupils and Non-Treaty Indian pupils.

Hypothesis 8

Significant differences in value orientation patterns will exist

between teachers recruited in the United Kingdom in 1965 and all other teachers and administrators in Northland School Division #61 in the school year 1965/66.

II. INSTRUMENTATION

In this section are described the three instruments used to elicit the value orientations of the three groups in the sample. Each instrument is a modification and extension of the original Kluckhohn instrument.¹ Copies of the instruments appear as Appendices A, B, and C. Modifications were deemed necessary because of the ecology of the northern Alberta Cree community, and of the use of the instrument with teachers and administrators, a largely urban-oriented group. Seven new items were constructed within the Kluckhohn model, and six Kluckhohn items dropped. Two items were constructed in the style of the Kluckhohn items, but outside the theoretical model. One miscellaneous item was used, entitled "Occupations."

Rationale for Modifying the Instrument

For valid cross-cultural testing, Kluckhohn insists that the crucial point is the use of highly generalized life situations in the various items in the schedule.² The goal is to reduce the proportions of possible idiosyncratic responses on specific items which may be emotionally loaded for certain individuals or groups. Also, absence of

¹Florence Rockwood Kluckhohn and Fred L. Strodbeck, *Variations in Value Orientations* (Evanston: Row, Peterson and Company, 1961), pp. 77-90.

²*Ibid.*, pp. 92-102.

a behavior sphere in one culture makes any item using that sphere invalid for cross-cultural testing purposes. Following this rationale, the following types of modifications were made in the Kluckhohn instrument:

1. addition of a "Being-in-Becoming" value orientation position in the "Activity" Value Orientation Area,
2. creation of new items within the experience of both Indian and non-Indian groups, and within the Kluckhohn theory of dominant and variant value orientations,
3. creation of new items in the Kluckhohn style, but lying outside the theoretical framework,
4. dropping items because of the absence of meaningful experiences in the northern Alberta forest setting.

The new items which were created were designed to test some points of contention concerning the actions of the Indian people in certain behavior spheres. Most of these lie within the economic-occupational category.

Actual modifications in the instruments will now be detailed.

Modifying the Kluckhohn Items

In all three instruments, respondents were presented with some twenty-five simulated real-life situations accompanied by three alternative choices of action for the persons involved in the situation. Respondents were asked to rank the alternatives in order of their preference for them. An example of the style is Item 14, Wage Work, which reads:

14. Wage Work

Three men were talking about three different ways of working. Each man had a different idea.

_____ A One said, "I like being my own boss,
and doing things my way. Then I can decide
what to do, start when I like and stop when
I like, and work as hard or as long as I
like."

_____ B The second man said, "I like to work
for a big company where I get paid regular
wages and where I have a general idea of
how many hours a day I will work, and what
will be expected of me."

_____ C A third man said, "I like to work with
a friend or several friends. We would work
together as equal partners and decide what
to do among ourselves."

After the reading of the above type of item, respondents were asked, "Which person do you think had the best idea?" Pupils and teachers, who handled their own questionnaires, were asked to mark 1 opposite this idea. The investigator marked the schedule for most of the parents, although some asked to mark their own. Then the investigator asked, "Which person do you think had the next best idea?" The figure 2 was marked opposite this choice. Obviously, the remaining item becomes "3", and was so marked. Tied ranks were permitted.

Identical items were used in the Parent's Interview Schedule and in the Pupil's Questionnaire. Initial instructions on the respective instruments differed because of the different methodologies employed with the two samples. Identifying data sheets also differed because of the data requirements for testing the sub-hypotheses.

The Teacher's and Administrator's Questionnaire was developed through the findings of the two phases of the Pilot Study. The Pilot Study was believed necessary because of the nature of the original Kluckhohn instrument, which was designed for rural people. With the

exception of Item 26 (Learning English), items in the Teacher's and Administrator's Questionnaire are parallel to those in the Parent's and Pupil's instruments, both in the numbering and in the value orientations being probed. Maintenance of the high level of generalization of the concepts, as required by the Kluckhohn theory, proved somewhat difficult. Edmonton teachers who evaluated the pilot study instruments requested more specificity in the two items referring to different levels of government. Some risk was involved in utilizing a more sophisticated vocabulary in the Teacher's and Administrator's schedule than in the schedule for the Indian samples, but the closest attention was paid to the denotation and connotation of any items with different vocabulary treatment.

No claim for cross-cultural validity of the new items is made for any setting outside northern Alberta. The new items were constructed to investigate specific social problems in the area, problems which might not exist in other settings.

Origin of the items in the Parent's Interview Schedule and in the Pupil's Questionnaire is detailed in Tables V--VIII inclusive, classified by Value Orientation Area and "Miscellaneous" categories. Origin of the items in the Teacher's and Administrator's Questionnaire is detailed in Table IX, which includes only those items which differ in origin from those in the parent's and pupil's instrument.

Table X lists the origin of the miscellaneous items, two based on the Kluckhohn model (Items 23 and 26), and one on Occupations.

TABLE V

ORIGIN OF ITEMS IN THE RELATIONAL VALUE ORIENTATION AREA--
PARENT'S INTERVIEW SCHEDULE AND PUPIL'S QUESTIONNAIRE

Item Number	Kluckhohn Number	Short Title	Modifications, Extensions, or Deletions Made
1	9	Choice of Delegate (Representative)	"settlement" substituted for "community"; "speak for them" added to content. Final statement changed from interrogative to declarative form. Minor changes for fluency.
7	7	Help in Misfortune	Crop failure and loss of sheep or cattle replaced by "his cabin burned down" and "he had to give up trapping or working for awhile because his wife was sick." Wording simplified.
11	New	Deciding How to Use Government Help (Allocation of Recreation Grant)	A new relational item in the Kluckhohn model designed to elicit values on a current problem in northern Alberta.
14	12	Wage Work	Fairly major adaptations to meet local work setting experience and terminology.
15	8	Family Work Relations	Minor changes for clarity.

TABLE V (continued)

Item Number	Kluckhohn Number	Short Title	Modifications, Extensions, or Deletions Made
18	New	Welfare Assistance	A new relational item to test a critical current problem in northern Alberta.
21	New	Leaving Residential School (Dropping Out of School)	A new relational item to test problem-solving behavior in a long-standing issue in Indian education.
-	2	Well Arrangements	Dropped. No wells in Wabasca.
-	16	Livestock Inheritance	Dropped. Minimal stock owned in Wabasca, with one exception.
-	17	Land Inheritance	Dropped. Almost no land ownership except by the Crown or large organizations.

TABLE VI

ORIGIN OF ITEMS IN THE TIME VALUE ORIENTATION AREA--
PARENT'S INTERVIEW SCHEDULE AND PUPIL'S QUESTIONNAIRE

Item Number	Cluckhohn Number	Short Title	Modifications, Extensions, or Deletions Made
3	3	Child Training	"help them find out new ways of doing things instead of following old ways" substituted for "make them want to find out for themselves new ways of doing things to replace the old."
5	5	Ideas (Expectations) About Change	"one day" replaced by "after they left school and started raising a family."
10	11	Ideas About (Philosophy of) Life	Minor changes for fluency.
17	14	Changes in Church Services (Ceremonial Innovation)	Minor changes for fluency.
19	New	Going Away to School	New item in time area to test emerging values towards recently-available free pre-employment training.
24	New	Sudden Community Wealth (Prosperity)	New item in the time area to test emerging values on an increasingly common phenomenon on Indian reserves in Alberta.
-	20	Water Allocation	Inappropriate. Each family gets own water from lakes.

TABLE VII

ORIGIN OF ITEMS IN THE MAN-NATURE VALUE ORIENTATION AREA--
PARENT'S INTERVIEW SCHEDULE AND PUPIL'S QUESTIONNAIRE

Item Number	Kluckhohn Number	Short Title	Modifications, Extensions, or Deletions Made
2	19	Length of Life	"persons" substituted for "men"; "die" substituted for "live." Minor changes for fluency.
6	6	Facing Conditions	"plants" substituted for "crops," of which there are very few in Wabasca. "working along with" substituted for "in harmony with." Sentence structure altered in first sentence to simpler form.
9	13	Belief in Control	"the land, the stock, and the water" deleted as inappropriate in a largely non-agricultural setting.
12	10	Use of Traplines (Environment)	"traplines" substituted for "fields." "working along with" substituted for "in harmony with." "scientific" dropped. "get more fur" substituted for "prevent the effects of bad conditions."
22	New	Hunting, Fishing, and Trapping	New Man-Nature Item to test values in a basic shift underway in the economic-occupational sphere in northern Alberta.
-	4	Livestock Dying	Dropped due to almost total lack of herding activities in Wabasca.

TABLE VIII

ORIGIN OF ITEMS IN THE ACTIVITY VALUE ORIENTATION AREA--
PARENT'S INTERVIEW SCHEDULE AND PUPIL'S QUESTIONNAIRE

Item Number	Kluckhohn Number	Short Title	Modifications, Extensions, or Deletions Made
4	1 (A1)	Job Choice	"Being-in-Becoming" alternative added. Minor changes for fluency.
8	15	Ways of Living	"Being-in-Becoming" alternative added. Wording simplified.
13	21	Housework	"Being-in-Becoming" alternative added.
16	22	Non-Working Time	"Being-in-Becoming" alternative added.
20	New	Women in the Modern World	New Activity Item to test possible changes in values in northern Alberta Indian culture concerning leaving school for marriage.
-	1 (A2)	Job Choice	Dropped. Inappropriate.

TABLE IX

ORIGIN OF ITEMS IN THE TEACHER'S AND ADMINISTRATOR'S QUESTIONNAIRES

Item Number	Kluckhohn Number	Short Title	Modifications, Extensions, or Deletions Made
RELATIONAL VALUE ORIENTATION AREA			
1	9	Choice of Representative	Following requests in pilot studies, situation concerning level of government made more specific.
11	New	Allocation of Recreation Grant	Following requests in pilot studies, situation concerning local and municipal governments made more specific.
15	8	Family Work Relations	Setting altered to imply exchange of views within one community rather than between communities.
21	New	Dropping Out of School	Setting made more general than in parent and pupil instruments.
TIME VALUE ORIENTATION AREA			
5	5	Expectations About Change	Kluckhohn wording for 40-up age group used.
24	New	Sudden Community Prosperity	Details added concerning ownership of oil rights, as requested by pilot study subjects.

TABLE IX (continued)

Item Number	Kluckhohn Number	Short Title	Modifications, Extensions, or Deletions Made
MAN-NATURE VALUE ORIENTATION AREA			
6	6	Facing Conditions	"Creator" substituted for "God."
9	13	Belief in Control	"cultures" substituted for "areas."
12	10	Use of Environment	Very difficult to adapt rural setting to urban one. "Environment" substituted for "traplines" and "physical and social resources of his community" for "traps."
ACTIVITY VALUE ORIENTATION AREA			
16	22	Non-Working Time	"T.V." added to the "Being" alternative.
20	New	Women in Modern World	Educational level of the girl in the situation was raised from VIII to Senior High School.

TABLE X
MISCELLANEOUS ITEMS

Item Number	Short Title	Information Concerning Item
INTERVIEW SCHEDULE		
(A) PARENT'S AND PUPIL'S QUESTIONNAIRE		
23	Types of Discipline	New item outside Kluckhohn theory but in Kluckhohn style, designed to test parent, pupil, and teacher reaction to "Physical," "Insightful," and "Emotional" types of discipline.
26	Learning English	New item outside Kluckhohn theory but in Kluckhohn style, designed to test parent and pupil understanding and values in the field of language.
25	Occupations	Follows French [†] in an attempt to elicit knowledge of occupational world in relation to ethnicity.
(B) TEACHER'S AND ADMINISTRATOR'S QUESTIONNAIRE		
23	Types of Discipline	As noted above in (A).
26	Learning English	Not used--considered a professional concept in learning theory rather than a value query.
25	Occupations	"occupations" substituted for "kinds of work."

[†]Cecil L. French, "Social Class and Motivation," *The Metis in Alberta Society* (Edmonton: University of Alberta Committee for Social Research, 1963), pp. 320-36.

Table XI lists the items by Value Orientation Area and Behavior Sphere, while Table XII details the numbering of the items through the various phases of the pilot and final study, and matches them, where applicable, with the original Kluckhohn model.

Validity and Reliability of the Kluckhohn Instrument

Statistical evidence of the validity and reliability of the Kluckhohn method is rather scant, although increasing. Repeated uses of the instrument in widely-varied situations indicate that it does discriminate successfully among the value orientations of different cultures, and that it is useful for detecting broad differences within the same culture. Findings from the Kluckhohn instrument have also supported independent hypotheses based upon historical and literary investigation. It is therefore considered to be valid for the purpose for which it was designed.

Determining the reliability of the Instrument is a more difficult problem, since the theory postulates variations between items, depending upon the behavior sphere being tapped. Kitchen,³ however, conducted a reliability re-test with 111 of his original sample of 2,132 Newfoundland pupils, and found low but reliable stability coefficients among samples.

III. THE PILOT STUDY

In order to reduce the possible error resulting from lack of

³Kitchen, *op. cit.*, pp. 178-84.

TABLE XI
DISTRIBUTION OF ITEMS BY VALUE ORIENTATION
AREA AND BEHAVIOR SPHERE

Item Number	Short Title	Value Orientation Area	Behavior Sphere
1	Choice of Delegate	Relational	Political
7	Help in Misfortune	Relational	Familial
11	Allocation Rec. Grant	Relational	Political
14	Wage Work	Relational	Econ.-Occup.
15	Family Work Rel'ns	Relational	Familial
18	Welfare Assistance	Relational	Econ.-Occup.
21	Leaving Res. School	Relational	Intell.-Aesth.
3	Child Training	Time	Familial
5	Ideas About Change	Time	Econ.-Occup.
10	Philosophy of Life	Time	Mixed
17	Ceremonial Innov'n	Time	Religious
19	Going Away to School	Time	Intell.-Aesth.
24	Sudden Com. Prosp.	Time	Econ.-Occup.
2	Length of Life	Man-Nature	Mixed
6	Facing Conditions	Man-Nature	Econ.-Occup.
9	Belief in Control	Man-Nature	Econ.-Occup.
12	Use of Environment	Man-Nature	Econ.-Occup.
22	Hunting, Fishing	Man-Nature	Econ.-Occup.
4	Job Choice	Activity	Econ.-Occup.
8	Ways of Living	Activity	Mixed
13	Housework	Activity	Econ.-Occup.
16	Non-Working Time	Activity	Recreational
20	Women in Modern W.	Activity	Econ.-Occup.
23	Types Discipline	Miscellaneous	Intell.-Aesth.
26	Learning English	Miscellaneous	Intell.-Aesth.
25	Occupations	Miscellaneous	Econ.-Occup.

Value Orientation Area Items

Relational Area . . .	7
Time Area	6
Man-Nature Area . . .	5
Activity	5
Miscellaneous	<u>3</u>
Total Items . . .	<u>26</u>

Behavior Sphere

Economic-Occupational . . .	12
Religious	1
Intellectual-Aesthetic . .	4
Recreational	1
Political	2
Familial	3
Mixed	<u>3</u>
Total Items	<u>26</u>

TABLE XII

NUMBERING OF ITEMS IN PILOT STUDY AND FINAL STUDY

Short Title	Kl'on Sched. Number	Grad. Std't Number	Call. L. Pupil and Parent Number	Edmon- ton Teacher Number	Final Instrument Number
Choice of Delegate	9	9	9	1	1
Length of Life	19	15	15	2	2
Child Training	3	3	3	3	3
Job Choice (A1)	1	4	4	4	4
Expectations Change	5	6	6	6	5
Facing Conditions	6	7	7	7	6
Help in Misfortune	7	8	8	8	7
Ways of Living	15	13	13	9	8
Belief in Control	13	11	11	11	9
Philos. of Life	11	10	10	13	10
Alloc'n Rec. Grant	20	16	16	15	11
Use Environment	10	1	1	14	12
Housework	21	17	17	16	13
Wage Work	12	19	19	17	14
Fam. Work Rel'ns	8	20	20	18	15
Non-Work'g Time	22	18	18	19	16
Ceremon. Innov't'n	14	12	12	20	17
Welfare Assist'ce	New	24	24	21	18
Going Away School	New	23	23	22	19
Women Mod. World	New	22	22	23	20
Dropping Out Sch.	New	27	26	25	21
Hunt'g, Fish'g, etc.	New	21	21	26	22
Types Discipline	New	29	29	27	23
Sudden Prosperity	New	28	27	28	24
Occupations	New	n.u. [†]	n.u.	n.u.	25
Eng. as Sec.Lang.	New	n.u.	30	n.u.	26 (Pupils and Parents)
Water Supply Arr.	2	2	2	n.u.	n.u.
Livestock Dying	4	5	5	5	n.u.
Cont. Education	New	14	14	12	n.u.
Occupations (M)	New	25	25	24	n.u.
Occupations (F)	New	26	28	10	n.u.
Livestock Inherit.	16	n.u.	n.u.	n.u.	n.u.
Land Inheritance	17	n.u.	n.u.	n.u.	n.u.
Job Choice (A2)	1	n.u.	n.u.	n.u.	n.u.
Care of Fields	18	n.u.	n.u.	n.u.	n.u.

[†] not used.

validity or reliability in the instruments, a three-phase Pilot Study was conducted. The two immediate objectives of the Pilot Study were to determine the power of the instruments to elicit patterns of value orientations along the Kluckhohn model of sufficient homogeneity (as measured by Kendall's "S"⁴) to warrant proceeding with the study. The second was to obtain information as to the appropriateness of the items and of the instrument in general for use with the three groups being tested.

Methodology in the Pilot Study. In the first phase of the Pilot Study, forty-eight graduate students in the Department of Educational Administration, University of Alberta, were asked to complete and return the first version of the Teacher's and Administrator's Questionnaire. Narrative criticisms were invited and received from the thirty-five students who returned the instrument in time for analysis. Substantial revisions were made from this pre-test.

As the second phase of the Pilot Study, the hamlet of Calling Lake, Alberta, about 145 miles north of Edmonton, was visited from November 30 to December 3, 196⁵, in order to allow the investigator to administer personally the Pupil's Questionnaire and Parent's Interview Schedule.

Twenty-five pupils completed the questionnaire, in two sittings, one on December 1, the other, December 2. Following Caudill's method as outlined by Kluckhohn,⁵ the questions were read orally to the pupils by

⁴Maurice G. Kendall, *Rank Correlation Methods*, 3rd Edition (New York: Hafner Publishing Company, 1962), pp. 99-106.

⁵Florence Rockwood Kluckhohn, "A Method for Eliciting Value Orientations," *Anthropological Linguistics*, II (February, 1960), 11.

the investigator, with pupils following the printed questionnaire at their desks. Nine parents were interviewed, eight in their own homes. Interpreters were needed for six of the nine interviews.

The third phase of the Pilot Study was the administration of the second version of the Teacher's and Administrator's Questionnaire to four groups of teachers in four widely-spaced elementary-junior high schools in the Edmonton Public school system. Each of the four staff groups was addressed as a body at staff meetings in order to have the study explained, and enlist co-operation in the voluntary completion of the questionnaire. Seventy-five usable questionnaires were obtained by December 21, 1965, from a potential yield of exactly 100. From the evaluatory comments received on the questionnaires, further revisions were made in the teacher's and administrator's schedule.

The final form of the schedule was distributed to Northland teachers and administrators at their annual convention, commencing January 4, 1966.

Results of the Pilot Study. The instruments for each of the three groups were found to yield a sufficiently satisfactory degree of patterning of responses to warrant their use in revised form in the final study. Through the home visits, many clues were obtained as to appropriate interviewing techniques in Indian families. One of the most important clues was the obvious necessity for a recorded Cree version of the Interview Schedule, prepared in a manner similar to that described by Roberts in working with the Zuni.⁶

⁶John M. Roberts, "The Zuni," in Kluckhohn and Strodbeck, *op. cit.*, p. 286.

IV. DATA COLLECTION

Teachers and Administrators

Permission was sought and obtained from the Edmonton Public School Board for the collection of data in phase three of the Pilot Study. In consultation with two senior members of the administrative staff of the central office, four schools were chosen for the Pilot Study, and the principals notified by the central office. Excellent co-operation was received in all cases.

Permission was sought and obtained from the Northland Local of the Alberta Teachers' Association to distribute the final form of the Teacher's and Administrator's Questionnaires on January 4, 1966, at the registration for the annual Northland Teachers' Convention. In addition, permission was received to use about fifteen minutes' time at the first business meeting of the Local later that day in order to introduce the study, draw attention to the instructions for completion of the questionnaire, and enlist participation. Teachers were encouraged to return the questionnaires during the convention, if possible, but stamped, self-addressed return envelopes were provided for all teachers in case of later return of the schedules by mail.

Three follow-up procedures were carried out. For those in schools on regular mail service, a postcard was mailed out on January 21, two weeks after distribution of the questionnaire. A copy of this card is found at Appendix D. A similar follow-up card for schools on irregular mail service was posted on January 27. On completion of the

field study at Wabasca, a third follow-up in the form of a letter and return postcard were sent out on February 23 and 24. A copy of this letter and return card are found at Appendix D. Three further questionnaires were despatched by mail on March 3 for three persons who had lost their originals. Data collection was cut off as of March 15, 1966. The rather long period of data collection was necessary because of the irregular mail service, as infrequent as once per month into some of the communities. Details of the dates of data collection of the Teacher's and Administrator's Questionnaires are given in Table XIII.

Parent's Interview Schedule

Arrangements had been made in the fall of 1965 with a former local district trustee of Wabasca School District to act as interpreter during the administration of the parent's interview schedule. This lady, mother of twelve children, was a former Treaty Indian who had become a community leader for the non-treaty or Metis people in the settlement. The interview schedule had been mailed to her several weeks before the field work in order for her to familiarize herself with it.

Three tape recordings of the schedule in Cree were made before a satisfactory one was obtained. This was checked by two bilingual Indian citizens of stature in the community, who agreed that it was a faithful translation of the English, with all due regard to the conceptual difficulties inherent in any translation.

Parents were interviewed in their homes by the investigator and interpreter. In most cases the visit was unannounced. Varying degrees

of bilingualism produced several patterns of administration. Some respondents listened only to the Cree tape, and gave their preferences in Cree to the interpreter. Some listened to the Cree tape and at the same time followed the schedule printed in English, while the investigator marked a second schedule. Some asked the investigator to read the schedule in English as they followed the printed words and told him what to mark. Three read the schedule silently and marked their preferences themselves, with the occasional request for the reading of an item orally. Following Kluckhohn closely, no additional explanations were given other than re-reading the exact item.

TABLE XIII

DISTRIBUTION AND RETURN OF TEACHER'S
AND ADMINISTRATOR'S QUESTIONNAIRES

Distribution

Potential number of questionnaires for completion	152
Distributed January 4, 1966, at Convention	140
Mailed January 10, 1966	12

Return

Returned during Convention	61
Returned by January 18, 1966	97
Returned by January 31, 1966	113
Returned by February 22, 1966	128
Returned by March 15, 1966	134

Percentage of Return

Gross percentage	88.2
Net percentage (129 usable protocols)	84.9

Administration of the schedules was done during daylight hours almost exclusively, and took from forty-five minutes to two hours. Small gifts of cigarettes for the parents and candies for the children were left at the homes in appreciation for the time spent on the interviews.

During the field work, the interpreter was called away to attend a community development meeting. Two middle-aged male replacements were suggested, both of whom were very satisfactory. The thirty interviews were completed between February 10 and 21, 1966.

Pupils' Questionnaires

Arrangements for the administration of the pupil's questionnaires had been made with the Principals of St. Theresa School, Wabasca, and Mistassiniy School, Demarais, at the time of the Teachers' Convention in Edmonton in early January.

On the morning of February 8, 1966, immediately following school opening, all pupils 12 years of age and upwards in St. Theresa School (Grades I-VI) were seated in the gymnasium for the administration of the questionnaire. A brief explanation of the purpose of the study was given, in simple terms, together with careful instructions concerning the marking of preferences on the schedule. The items were then read to the group orally by the investigator while the pupils followed the printed schedule on their desks. Pacing was slow, and an opportunity given at the end of each item for re-reading the item, or for taking more time to choose preferences. A ten-minute break outside was allowed midway in the schedule to reduce mental fatigue. Completion of the identifying

data portion of the questionnaire required some help from the teachers concerning birth dates, treaty numbers, and the distinction between living in the residential school and taking classes there. The total administration time, including break, was about 1 3/4 hours.

Administration of the questionnaire at Mistassiniy School, Desmarais, took place the following morning, February 9, under almost identical conditions. Pupils in this school ranged in age from twelve to eighteen years. Perfect order and attentive co-operation marked the completion of the schedules in both schools.

V. THE SAMPLE

Teachers and Administrators

The teacher and administrator sample was to consist of all teachers and administrators, including central office staff, employed by Northland School Division #61 during the school year 1965/66. The staff list of the Division was obtained and used as the basic source of information on the sample as far as distribution and follow-up matters were concerned. As noted in Table XIII, 134 out of 152 questionnaires were returned, of which 129 were usable. This represented 84.9 per cent of the teacher and administrator population. Distribution of this sample by U.K. recruitment, 1965, age, sex, and years of teacher education is shown in Table XIV. Distribution by U.K. recruitment, 1965, sex, and marital status are shown in Table XV.

TABLE XIV

DISTRIBUTION OF TEACHER AND ADMINISTRATOR SAMPLE BY
U.K. 1965 RECRUITMENT, AGE, SEX, AND YEARS OF TEACHER EDUCATION

	U.K. RECRUITED 1965				NON-U.K. 1965				Grand Total
Years of Teach. Ed.	M	F	Not Stated	Total	M	F	Not Stated	Total	
1	2	0	1	3	5	18	3	26	29
2	12	7	0	19	9	10	0	19	38
3	4	6	0	10	17	8	1	26	36
4,5,6	6	1	1	8	16	2	0	18	26
Total	24	14	2	40	47	38	4	89	129

Age									
Below 20	0	0	0	0	0	0	0	0	0
20 - 29	9	10	0	19	21	13	0	34	53
30 - 39	7	4	0	11	17	11	0	28	39
40 - 49	7	0	0	7	5	6	0	11	18
50 - 59	0	0	0	0	1	4	0	5	5
60 - 69	0	0	0	0	2	4	0	6	6
70 and up	0	0	0	0	1	0	0	1	1
Not Stated	1	2	0	3			4	4	7
Total	24	16	0	40	47	38	4	89	129

TABLE XV
DISTRIBUTION OF TEACHER AND ADMINISTRATOR SAMPLE BY
U.K. RECRUITMENT, SEX, AND MARITAL STATUS

	U.K. RECRUITED, 1965			NON-U.K.RECRUITED 1965			Grand Total
Marital Status	Male	Female	Total	Male	Female	Total	
Single	4	11	15	9	22	31	46
Married	17	3	20	36	13	49	69
Widow	-	0	0	-	2	2	2
Widower	0	-	0	2	-	2	2
Divorced	1	0	1	0	1	1	2
Separated	0	0	0	0	0	0	0
Not Stated	2	2	4	0	4	4	8
	24	16	40	47	42	89	129

Parents

Official lists of the names of pupils and of their parents or guardians were supplied in January, 1966, by the Principals of St. Theresa School and Mistassiniy School. These lists, representing enrolments as of October 1, 1965, showed the names of 266 apparently different male and female parents or guardians. These names, with the spouse's name also indicated, were written on slips of paper and then discussed with the interpreter and her husband. As a result of this examination and discussion, the list was reduced to 205. Deletions were caused by decease or removal of parents since October, 1965, names of parents residing outside the district but having children in the residential schools, those whose names had been spelled differently

by different children in the family, and duplications of those unmarried women going under several names as a result of common-law unions.

Numbers were assigned the names, and a basic list of fifteen males and fifteen females chosen with the aid of a table of random numbers. Several additional names were chosen in the same manner to form a reserve pool upon which to draw in case of the unavailability of one or more persons on the basic list.

During the field work, the names of six persons were struck off the original parents' list due to illness, absence from the community, or refusal to participate in the study. Six other persons, chosen from the reserve list of the random sample, completed the final sample of fifteen male and fifteen female parents of Indian ancestry. Distribution of this sample by Treaty status, sex, age, and years of schooling is shown in Table XVI.

Pupils

One hundred fifty-three pupils attempted the pupil's questionnaire, but six of the schedules were not used because of incompleteness or the age of the pupil being below twelve years. Nine schedules were not used because the pupils were of non-Indian ancestry. The net sample therefore numbered 138. The distribution of this sample by Treaty status, sex, age, and years of residential school experience is shown in Table XVII; by grade and Treaty status in Table XVIII, and by age and grade in school in Table XIX.

TABLE XVI

DISTRIBUTION OF PARENT SAMPLE BY AGE, SEX,
TREATY STATUS, AND NUMBER OF YEARS' SCHOOLING

Male			Female			Grand Total	
Age	Treaty	Non-Tr.	Total	Treaty	Non-Tr.	Total	
20 - 29	0	0	0	1	1	2	2
30 - 39	1	3	4	4	3	7	11
40 - 49	4	0	4	0	4	4	8
50 - 59	2	2	4	1	1	2	6
60 - 69	1	1	2	0	0	0	2
70 - over	0	1	1	0	0	0	1
Total	8	7	15	6	9	15	30
Years of Schooling							
0	1	0	1	1	1	2	3
1	1	0	1	0	0	0	1
2	1	1	2	1	0	1	3
3	0	1	1	0	2	2	3
4	1	0	1	0	0	0	1
5	1	0	1	0	1	1	2
6	1	3	4	2	0	2	6
7	0	1	1	2	0	2	3
8	2	0	2	0	1	1	3
9	0	1	1	0	3	3	4
10	0	0	0	0	1	1	1
Total	8	7	15	6	9	15	30

TABLE XVII

DISTRIBUTION OF PUPIL SAMPLE BY SEX, AGE, TREATY STATUS,
AND RESIDENTIAL SCHOOL EXPERIENCE

AGE IN YEARS	MALE		FEMALE		TOTAL TREATY	TOTAL NON-T.	GRAND TOTAL
	Treaty	Non-Treaty	Total	Treaty	Non-Treaty	Total	
12	7	2	9	11	5	16	25
13	9	9	18	14	5	19	37
14	10	8	18	6	6	12	30
15	10	4	14	12	5	17	31
16,17,18	5	2	7	6	2	8	15
TOTAL	41	25	66	49	23	72	138

Years of Residential School Exper.					TOTAL TREATY	TOTAL NON-T.	GRAND TOTAL
	Treaty	Non-Treaty	Total	Treaty	Non-Treaty	Total	
0	5	24	29	10	22	32	61
1,2,3	12	1	13	8	1	9	22
4,5,6	15	0	15	13	0	13	28
7,8,9	9	0	9	18	0	18	27
TOTAL	41	25	66	49	23	72	138

TABLE XVIII

DISTRIBUTION OF PUPIL SAMPLE BY GRADE AND TREATY STATUS

Grade	Treaty	Non-Treaty	Total
I	0	0	0
II	0	0	0
III	0	1	1
IV	4	1	5
V	11	10	21
VI	22	11	33
VII	27	12	39
VIII	18	7	25
IX	8	6	14
Total	90	48	138

TABLE XIX

DISTRIBUTION OF PUPIL SAMPLE BY AGE AND GRADE

Age	I	II	III	IV	V	VI	VII	VIII	IX	Total
12	-	-	-	4	8	11	2			25
13	-	-	-	1	5	15	13	3		37
14	-	-	-	-	5	7	8	9	1	30
15	-	-	-	-	3	-	13	9	6	31
16,17,18	-	-	-	-	-	-	3	5	7	15
Total	-	-	-	5	21	33	39	26	14	138

VI. DATA PROCESSING

Information from the protocols was punched and verified on IBM cards, either directly or following coding. A special Fortran program was written for the computation of Kendall's "S" and the binomial analysis of preference pairs, as outlined in Part VII of this chapter.⁷ The Fortran program was written by Dr. S. M. Hunka, Director of the Division of Educational Research, Faculty of Education, for use in the IBM 7040 computer of the Department of Computing Science of the University of Alberta.

VII. STATISTICAL ANALYSIS

A pivotal feature of the Kluckhohn theory is the concept that both dominant and variant positions in the triples must be considered simultaneously in making between-group comparisons. This is not an easy problem in statistical analysis. Four distinct questions must be asked in order to determine differences in cultural "patterns" of value orientations. In sequence of data treatment, these questions are:⁸

1. Item Patterning. After members of a culture have ranked the alternative positions in a value orientation *item*, what degree of homogeneity of patterning of preferences is observed above what could have occurred by chance alone?

⁷*Infra*, p. 105.

⁸Adapted from Kluckhohn and Strodtbeck, *op. cit.*, pp. 122-23.

2. Intra-Item Patterning. After members of a culture have ranked the alternatives in an *item*, what degree of homogeneity of preference is observed for one particular alternative over another particular alternative within the same item?

3. Area Patterning. After members of a culture have ranked the alternatives in a value orientation *area*, what is the final rank-ordering of alternatives and the degree of homogeneity of preference for this ordering within this area?

4. Total Cultural Patterning. After members of different cultures have ranked all the alternatives in all value orientation areas, what kind and degree of differences in type and homogeneity of patterning are observed in the *total value orientation patterns* of the different cultures?

These questions led to the consideration of appropriate statistical tests to apply to the data collected by the Kluckhohn technique. Broadly, tests of significance in sampling theory fall into two groups--parametric and nonparametric. If parametric tests are to be used, Siegel⁹ points out that the following assumptions must be met:

1. independence of observations
2. normality of distribution of the trait in the population
3. homogeneity of variance of the trait in the population
4. interval scale of measurement

⁹Sidney Siegel, *Nonparametric Statistics for the Behavioral Sciences* (New York: McGraw-Hill Book Company, Inc., 1956), p. 19.

5. in the case of the analysis of variance, using an F test, the means of the normal and homoscedastic populations must be linear combinations of effects due to columns and/or rows. In other words, the effects must be additive.

In the Kluckhohn method of eliciting value orientations, data are clearly accumulated at the ordinal level of measurement. In discussing such data, Siegel holds that:

. . . parametric statistical tests, which use means and standard deviations (i.e., which require the operations of arithmetic on the original scores) ought not to be used with data in an ordinal scale. The properties of an ordinal scale are *not* isomorphic to the numerical system known as arithmetic. When only the rank order of scores is known, means and standard deviations found on the scores themselves are in error to the extent that successive intervals (distances between classes) on the scale are not equal. When parametric techniques of statistical inference are used with such data, any decisions about hypotheses are doubtful.¹⁰

Following this rationale, this study therefore employed the following nonparametric procedures:

1. Calculation of Kendall's "S"
2. binomial analysis between pairs of alternatives
3. a "distance" concept proposed by Caudill and Scarr¹¹
4. chi-square tests of independence.

The manner in which the four questions posed above were answered by these statistical procedures will now be described.

¹⁰*op. cit.*, p. 26.

¹¹Caudill and Scarr, *op. cit.*, pp. 58-59.

1. Item Patterning

The null hypothesis in the determination of the existence of item patterning is:

$$H_0: A = B = C$$

where A, B, and C represent the sums of ranks of preferences for each of the three alternatives in each item. In order to test this hypothesis, Kendall's "S" was applied to the data in the manner outlined by Kendall¹² and by Strodbeck.¹² The value of S/m (where m = the number of respondents) is also shown in order to give a basis for comparison between groups.

2. Intra-Item Patterning

The null hypothesis for testing the pattern, within an item, of preferences for one particular alternative over another is:

$$H_0: A = B = C$$

where A, B, and C represent the sums of ranks of preferences for each of the three alternatives in each item. Procedures to test this hypothesis provide information concerning the actual rank-ordering of the preferences, in contrast to the test in (1) above, which merely shows whether or not a pattern exists above what could be expected by chance alone.

Range of possible rank-ordering. Examination of the Kluckhohn-type

¹²Kendall, *op. cit.*, pp. 94-95; Kluckhohn and Strodbeck, *op. cit.*, pp. 124-27.

model of preferences in triples reveals thirteen possible orderings of the triple, provided the expression of ordering is confined to "greater than," and "equal to." Kluckhohn suggests that the symbol > be used to indicate "is preferred to," and the symbol = be used to indicate "is equally preferred." Using this notation, the thirteen possible positions become:

Pure Rank-Order Types	Linked First-Order Types	Linked Second-Order Types
A > B > C	A = B > C	A > B = C
A > C > B	A = C > B	C > B = A
B > A > C	B = C > A	B > A = C
B > C > A	<div>Non-Ordered Types</div>	
C > B > A		
C > A > B		
	A = B = C	

Other possible positions are mirror-images of the above, and provide no new information concerning the rank-ordering possibilities of a triple.

A first approximation of the rank-ordering of preferences is obtained from inspection of the sums of ranks of preferences. Clearly, the lowest sum represents the highest preference, the next lowest sum the next highest preference, and the highest sum, the lowest preference. This summing procedure does not provide any information as to the degree of homogeneity of response patterns, above what could be expected by chance alone. Strodbeck states that no statistical techniques are yet available which would produce this type of information in one operation.¹³

¹³Kluckhohn and Strodbeck, *op. cit.*, p. 131.

He suggests, therefore, testing the null hypothesis in three sections, using a binomial analysis of pairs of alternatives within each item.

The null hypothesis might then be written in three parts:

$$Ho_1: A = B$$

$$Ho_2: A = C$$

$$Ho_3: B = C$$

In order to use the binomial technique, scores are required. Three such scores were obtained for each respondent by computing (1) the number of times he chose A in preference to B, (2) the number of times he chose A in preference to C, and (3) the number of times he chose B in preference to C. Each such choice was given a score of 1. In the case of tied ranks, both alternatives were given a score of 1/2. The scores thus obtained were summed for each sample and sub-sample and used as the frequencies for binomial analysis against the normal curve according to the formula presented by Strodbeck.¹⁴

3. Area Patterning

Strodbeck warns that due to lack of knowledge about the independence of observations, the summing of Kendall's "S" across all items of a value orientation area of a culture is not admissible.¹⁵ He then suggests the use of a *t* test of the observed means of the frequencies established for binomial testing. Since in this study the investigator

¹⁴*loc. cit.*

¹⁵*Ibid.*, p. 133.

chose to use only nonparametric tests, binomial analysis was again used in the area patterning in order to determine the direction and degree of homogeneity of response patterns above what could be expected by chance alone.

The procedure used was the summing of all preference scores for all alternatives in all items in any one value orientation *area*. This is the same procedure that was used for determining item homogeneity of response for preference pairs, but expanded in order to obtain area scores. In order to determine the correct ordering of the three value orientation positions, the area scores were evaluated against a theoretical null mean to obtain direction. This mean was obtained by multiplying the number of respondents by the number of items in each area, giving the maximum possible score if all were to choose alike in all items, then dividing this product by two. Under the binomial theorem, a position of "no preference" would be indicated by one-half of the respondents choosing one alternative, one-half, the other.

Scores were accumulated under the headings $A > B$, $A > C$, and $B > C$. If the area score fell above the null mean, the order was clearly the same as the original order in computation. If the area score fell below the null mean, the ordering was reversed to that used in computation.

Symbolic Notation for Statistical Significance

Following Strodtbeck, this study used, where needed, symbolic notation in reporting the statistical significance of intra-item or

area preferences.¹⁶ The suggested notation is as follows:

- $A > B > C$ All three pairs of alternatives (A over B, A over C, and B over C) hold at the .05 level or better.
- $A \geq B > C$ Only A over C and B over C hold at the .05 level. Even though A may be preferred more frequently than B, the frequency does not reach the .05 level.
- $A > B \geq C$ Only A over B and A over C hold at the .05 level. Even though B may be preferred more frequently than C, the frequency does not reach the .05 level.
- $A \geq B \geq C^{*\dagger}$ Only A over C holds at the .05 level or better.
- $A \geq B \geq C$ None of the preference frequencies within two pairs reaches the .05 level of significance.

An example drawn from the sub-group of pupils aged 14 years (N=30) may serve to illustrate the procedure for binomial analysis of significance of preferences and of rank-ordering of preferences. In the Relational value orientation area for the 14-year-old pupils, the null mean was found for the seven items as follows:

$$\bar{X} = \frac{7 \times 30}{2} = 105$$

Observed scores for this sub-group in the Relational area, with the null mean indicated below each, were computed to be as follows:

¹⁶*Ibid.*, pp. 131-32.

[†] The asterisk is used by Strodbeck as a statistical symbol for this type of triple, not a symbol for a footnote.

	Lin. > Coll.	Lin. > Indiv.	Coll. > Indiv.
Observed Scores	112.5	108.0	103.5
Null mean	105.0	105.0	105.0

In the preference pair computed as Lineality preferred over Collaterality, the observed score lies above the null mean, and the ordering remains as it was when originally computed--Lineality preferred over Collaterality. In the next alternative pair (Lineality preferred over Individualism), the score again lies above the null mean, leaving the ordering as computed--Lineality preferred over Individualism. However, in the third pair of alternatives (Collaterality preferred over Individualism), the observed score fell *below* the null mean, and the final ordering of preference in this pair must be inverted from the computed order, which produces the ordering Individualism preferred over Collaterality.

Placing these three pairs of choices in logical order, then, produces the final rank-ordering: Lineality preferred over Individualism preferred over Collaterality. In symbolic notation, this becomes:

$$\text{Lin} \succ \text{Indiv} \succ \text{Coll}$$

Comparing the observed scores with the null mean shows clearly that the degree of homogeneity of preferences above what could be expected by chance alone was very slight. Using the normal curve approximation of the binomial, it was found that statistical significance of all three pairs failed to reach the .05 level.

Between-Culture Differences

Up to this point in this section, methods have been demonstrated which were used to establish the degree of homogeneity of patterning for each item; of the degree of homogeneity of preferences for pairs of alternatives within each item; and of the actual rank-ordering of value orientation positions both in individual items and in areas.

The hypotheses of this study required the testing of differences in value orientation patterns of one culture as against those of another, and of one sub-group within a culture as against another within the same culture. Kluckhohn does not offer a definition of a "pattern" of value orientations for a total culture. Evaluation of a pattern should consist of some technique for evaluating all value orientation areas of one culture with all those of another, simultaneously. This study attempted to provide such a technique.

In this technique, differences in pattern are considered to fall into two major classes: differences in type of pattern and differences in degree of homogeneity of responses. If the total effect of these two factors is labelled "P", the null hypothesis for between-culture differences in pattern becomes:

$$H_0: P_1 = P_2 = P_3 \dots = P_k$$

Testing for Differences in Type of Pattern. The differences which are most readily observable yet at the same time most difficult to quantify are those of differing rank-ordering of preferences. For

example, how "large" is the difference between a Pres. > Fut. > Past ordering and a Fut. > Pres. > Past ordering? In this study, the rationale suggested by Caudill and Scarr was employed.¹⁷

This rationale, based entirely upon logic, requires the determination of the number of inversions of adjacent categories required to convert one rank-ordering to another. For example, to transform $A > B > C$ into $A > C > B$ requires but one inversion, that of B and C. This is termed a "one-distance" difference. In contrast, transforming the ordering $A > B > C$ to the ordering $C > B > A$ requires three steps. This is termed a "three-distance" difference. In any triple, the possible range of differences lies between one and three.

The Caudill rationale is particularly appropriate for application to the Kluckhohn theory and model, since one total value orientation pattern is simultaneously compared with another. In discussing severity of cultural change, Kluckhohn suggests that "logical" shifts in value orientations occur between first- and second-order preferences, or between second- and third-order preferences. Shifts, however, between first- and third-order preferences are "more illogical" and disruptive to the culture involved.¹⁸ Caudill's "two-distance" and "three-distance" measures give some quantification to Kluckhohn's hypothesis.

¹⁷Caudill and Scarr, *op. cit.*, pp. 53-91.

¹⁸Kluckhohn and Strodtbeck, *op. cit.*, pp. 358-59.

In this study, the number of "distance" differences was computed for each item and for each area in the total parent, pupil, and teacher sample, and for each value orientation area in the sub-samples. The frequencies thus obtained became the data for testing the differences in type of cultural patterns of value orientations between the three groups, and within the groups.

Testing for Differences in Homogeneity of Patterning. The degree of homogeneity of patterning was tested in two ways:

1. comparing the frequency with which Kendall's "S" in any two groups failed to reach the .05 level of statistical significance in all items, and
2. comparing the frequency with which binomial analysis of patterning within items and within areas reached the .001 level of statistical significance in any two groups.

A further check on the homogeneity of patterning in any two groups was made through the use of 2 x 3 contingency tables¹⁹ and the χ^2 test for association or independence using d.f. = 2. In any two groups demonstrating the same type of rank-ordering of items, comparisons were made of the homogeneity of patterning of preferences for any two alternatives in an item. The level of significance of χ^2 values for rejection of the null hypothesis of no difference was set at .01, in view of the lack of information about sampling distribution of Kluckhohn-type responses. This χ^2 test was considered supporting evidence only in testing for homo-

¹⁹George A. Ferguson, *Statistical Analysis in Psychology and Education* (New York: McGraw-Hill Book Company, Inc., 1959), pp. 165-68.

geneity of response patterning.

Decision Rule for Testing Between-Culture and Within-Culture Hypotheses

Taking into consideration both the differences in type and the differences in degree of homogeneity of response patterning, the following decision rule was arbitrarily adopted to test hypotheses 4 to 8 inclusive, concerning the differences in value orientation "patterns" between any two cultures or groups:

A. Differences in Type of Patterning

Reject the null hypothesis $H_0: P_1 = P_2$ when differences in rank-ordering of value orientations between two cultures or groups exist to the extent of one-, two-, or three-distance differences involving a dominant value orientation in one or more value orientation *areas*.

OR

B. Differences in Homogeneity of Patterning

Reject the null hypothesis $H_0: P_1 = P_2$ when differences in homogeneity of patterning exist between two cultures or groups to the extent of:

1. a net difference of *six* or more in the frequency of *items* failing to reach the .05 level of statistical significance in homogeneity of patterning as measured by S/m values, and
2. a net difference of *three* or more in the frequency of pairs of preferences for alternatives in value orientation *areas* reaching .001 level of statistical significance as measured by binomial analysis.

The rationale for the selection of the frequencies for the rejection

of the null hypothesis was that a between-group difference of twenty-five per cent or more in the number of items or value orientation areas reaching the chosen levels of statistical significance constituted evidence of a significant difference in "cultural patterns."

VIII. SUMMARY

This chapter has presented the research design of the study, including the hypotheses, instrumentation, pilot study, data collection, sample, data processing, and statistical analysis.

The hypotheses were designed to test predictions concerning the dominant value orientations of Indian parents, adolescent Indian pupils, and teachers and administrators in Northland School Division #61, and to establish the differences in value orientation patterns of the three groups according to the Kluckhohn theory.

The instrument used was an adaptation and extension of the F. Kluckhohn instrument used in the Five Cultures Study in New Mexico, together with an additional four items not lying within the Kluckhohn rationale. A three-phase pilot study was carried out in an effort to increase the validity and reliability of the instrument for the northern Alberta setting. Samples in the pilot study were drawn from graduate students in educational administration at the University of Alberta, teachers in the Edmonton Public School system, and Indian parents and pupils at Calling Lake, Alberta.

The data for the study itself were collected by the investigator during a two-week visit to Wabasca, Alberta, in February, 1966. Thirty

parents were interviewed in their homes, one hundred thirty-eight pupils provided usable protocols from group testing, and one hundred twenty-nine teachers and administrators in Northland School Division returned usable questionnaires following their distribution at the Northland-Alberta Indian Education Association Convention in Edmonton in January, 1966. Data were punched on I.B.M. cards, and a special program was written for processing the Kluckhohn-type data on the 7040 computer at the University of Alberta.

Nonparametric statistical techniques were employed throughout in the analysis of the data, as it was held that the type of data collected under the Kluckhohn method cannot meet the assumptions underlying parametric statistical analysis. Differences in type of response patterns were established through the use of Caudill's "distance" concept. Differences in homogeneity of patterning were established through the use of Kendall's "S" and of binomial analysis against the normal curve. A decision rule was established to accept or reject the null hypothesis of no inter- or intra-cultural differences, based on the assumption that a lack of congruence in type or degree of response to the extent of twenty-five per cent or more in item or area patterns would constitute evidence of a difference in total cultural pattern of one group compared with another.

CHAPTER V

VALUE ORIENTATION PATTERNS OF PARENTS, PUPILS, AND TEACHERS IN NORTHLAND SCHOOL DIVISION #61

This chapter presents the findings relevant to Hypotheses 1, 2, and 3, which deal with the dominant value orientations of parents, pupils, and teachers.¹ Predictions were made concerning dominant orientations only because of the lack of prior systematic documentation of the northern Alberta forest Cree, or of prolonged participant observation by the investigator. No lack of importance of the variant value orientations is thereby implied, as the critical importance attached by Kluckhohn to the consideration of a three-position, rank-ordered pattern is accepted in the study.

As a result of the data generated by the study, it is now possible to present the full value orientation patterns of parents, pupils, and teachers and administrators. These are found in Table XX, using the symbolic notation suggested by Kluckhohn and Strodtbeck and described previously in Chapter IV.² The notation gives some indication of the degree of homogeneity of response patterns within each rank-ordered value orientation, up to the .05 level of statistical significance. Levels of significance to .01 and .001 were also computed, but it is difficult to incorporate these in a scheme of symbolic notation without

¹*Supra*, p. 69.

²*Supra*, p. 107.

TABLE XX

VALUE ORIENTATION PATTERNS OF PARENTS, PUPILS,
AND TEACHERS IN NORTHLAND SCHOOL DIVISION #61*

Value Orientation Area	Parents	Pupils	Teachers
Relational	Lin > Coll ≥ Indiv	Lin > Coll > Indiv	Indiv > Lin > Coll
Time	Fut ≥ Pres > Past	Fut > Pres > Past	Fut > Pres > Past
Man-Nature	Mast ≥ Harm > Subj	Subj > Mast ≥ Harm	Mast > Harm > Subj
Activity	B.Bc. ≥ Doing > B	B.Bc. ≥ Doing > B	B.Bc. > Doing > B

*Numerical frequencies of choices in the preference pairs in the twelve cells will be found in Appendix E, Table XLII.

loss of clarity in the visual symbols.

I. VALUE ORIENTATION PATTERNS OF PARENTS

Testing Hypothesis 1

Hypothesis 1 predicted that the dominant value orientations of Indian parents would be Collaterality, Present, Harmony-with-Nature, and Being. Clearly, the hypothesis was not supported in any of the four value orientation areas. The dominant positions were found to be Lineality, Future, Mastery-over-Nature, and Being-in-Becoming.

Discussion. The ambivalence of the Indian parents is an important feature of the total pattern. Of the four value orientation areas, only the Relational possesses a strong first-order choice--Lineality preferred over Collaterality. In contrast, the preference of Future over Present lay almost at the null mean of random choice. Mastery was preferred but slightly over Harmony-with-Nature, and Being-in-Becoming over Doing by an even smaller margin. If Kluckhohn's theory is accepted insofar as lack of firm patterning is concerned, it could be hypothesized that Indian parents in Northern Alberta are in the midst of severe cultural change.

The stereotype of the indolent Indian interested only in satisfying basic needs would appear to be unsupported because of the strong preference of the parents for the Doing and Being-in-Becoming orientations.

A more detailed analysis of the patterns, item by item, will be given in Chapter VI during the discussion of inter-group differences.

II. VALUE ORIENTATIONS OF PUPILS

Testing Hypothesis 2

Hypothesis 2 predicted that the dominant value orientations of adolescent Indian pupils would be Collaterality, Present, Harmony-with-Nature, and Being. The findings indicate complete rejection of the hypothesis, since the dominant positions proved to be Lineality, Future, Subject-to-Nature, and Being-in-Becoming.

Discussion. Pupils showed greater homogeneity in response patterning than did their parents, since only the preference of Being-in-Becoming over Doing failed to reach the .05 level of statistical significance. Similarly, in the third-order choices, only one preference, Mastery-over-Nature preferred above Harmony-with-Nature, failed to reach the .05 level of statistical significance. The high proportion of statistically significant response patterns indicates a considerable degree of homogeneity of value orientations among the pupils, in spite of the effect one might anticipate would result from immaturity in the younger age groups.

A finding of considerable interest was the strong preference for the Subject-to-Nature orientation among the pupils. The finding was supported by a similar trend in the Calling Lake pre-test in which pupils gave Subject-to-Nature first preference in four out of six items. Pothier and Chance³ found that white children in Quebec also displayed

³Roger Pothier et Norman A. Chance, "Etude des Orientations de Valeurs parmi les Indiens Mistassini du Quebec" (Montreal: McGill-Cree Project, McGill University, 1966), p. 39a.

this orientation in completing the Kluckhohn questionnaire. It could be hypothesized that this finding is a factor of age rather than culture, particularly in view of the different rank-ordering of the Indian parents on the same item. Since the research design did not call for a control sample of white children (of whom there are less than a dozen attending school in Wabasca-Desmarais), the finding calls for replication with a sample of white children.

The rejection of the Being value orientation was most marked, although the choice between Being-in-Becoming and Doing was not significant. However, the finding opens the question of the motivation of Indian children, whom teachers have usually classified as "lacking in motivation."

Detailed item-by-item discussion of the findings will be given in Chapter VI in the section concerning inter-group differences.

III. VALUE ORIENTATION PATTERNS OF TEACHERS

Testing Hypothesis 3

Hypothesis 3 predicted that the dominant value orientation positions of teachers and administrators would be Individualism, Future, Mastery-over-Nature, and Doing. In three of the four value orientation areas, the hypothesis received powerful support, as the positions found were Individualism, Future, Mastery-over-Nature, and Being-in-Becoming. With the exception of the preference for Individualism, which was preferred over Lineality at .05 level, all preferences in the dominant positions were statistically significant well beyond the .001 level.

Discussion. The very strong preference for Being-in-Becoming over Doing runs counter to commonly accepted ideas about the North American culture. Kluckhohn assumes that the dominant value orientations of the total culture of the United States are: Individualism, Future, Mastery-over-Nature, and Doing.⁴ The finding about Northland teachers and administrators, therefore, could raise the question of the commitment of this teaching staff to the work ethic. The strong preference for self-actualizing activities might be hypothesized to indicate a sub-cultural grouping of teachers in this value orientation area. The hypothesis is given further support from the pilot study finding that Edmonton teachers gave first-order preference to Being-in-Becoming in five out of six items in this value orientation area.

Relatively lower homogeneity of preferences in the Relational area compared with the other three areas is a point worthy of mention. Although all patterns are well above that which could be expected by chance alone, teachers and administrators were generally considerably less certain of their preferences than they were in the Time, Man-Nature, and Activity areas. It could be suggested that this may represent cultural transition in the dominant white society, but of a degree somewhat less than that postulated for the Indian sub-culture.

IV. SUMMARY

The complete lack of support for Hypotheses 1 and 2 is a matter

⁴Kluckhohn and Strodtbeck, *op. cit.*, p. 29.

of some importance, especially when taken in conjunction with the much higher degree of success in predicting value orientations in Hypothesis 3.

This chapter has presented only the basic findings of the value orientation patterns of the three major groups in the sample, without attempting to make between-group or within-group comparisons. Chapters VI, VII, VIII, and IX discuss the differences between the samples and sub-samples according to certain criterion variables.

CHAPTER VI

VARIATIONS IN VALUE ORIENTATION PATTERNS OF PARENTS AND PUPILS

The purpose of this chapter is to expand the information given in Chapter V and to test Hypothesis 4 concerning differences in value orientation patterns of Indian parents and adolescent Indian pupils. The additional information over and above that already presented includes the following: item-by-item analysis of the rank-ordering of value orientation preferences; tabulation of the distance differences between rank-ordering patterns; homogeneity of overall item response patterns; homogeneity of internal response patterns in items and areas; and an indication by a χ^2 test of the degree of association or independence between items displaying the same rank-ordering pattern.

The frequency of the type differences and degree of homogeneity of response differences was computed and tabulated, and served as the basic data for the acceptance or rejection of the null hypothesis of no difference between the two groups.

Table XXI contains item-by-item findings for both groups showing rank-ordering of preferences, distances between rank-orderings of the two groups, homogeneity of overall item responses (Kendall's "S" divided by the number of respondents), frequency of within-area preferences reaching the .001 level of statistical significance (measured by binomial analysis), and χ^2 values for differences in homogeneity of response patterns between groups in similarly-ordered items. Tabulated by value orientation areas, the findings for each item for parent sample

and pupil sample, follow.

I. RELATIONAL VALUE ORIENTATION AREA

The three possible orientations in the Relational value orientation area are: Lineality (L), Collaterality (C), and Individualism (I).

Item 1: Choice of Delegate

In this item the responses of the parents lay very close to chance answering, with a pattern of Lineality preferred to Collaterality, which is equally preferred to Individualism ($L > C = I$). Pupils responded somewhat more decisively with a pattern Collaterality preferred to Individualism preferred to Lineality ($C > I > L$). The pattern did not, however, reach the .05 level of statistical significance in homogeneity of response. The patterns represent a two-distance difference between parents and pupils, but with the very low level of homogeneity of response among the parents, the import of the difference is probably slight.

Item 7: Help in Misfortune

Parents' responses to this item showed some homogeneity of patterning, but still below the .05 level of significance. They chose Lineality over Individualism over Collaterality ($L \geq I > C$). Pupils also gave Lineality the dominant position, but were not entirely certain of their choice between Individualism and Collaterality for second place. Their final pattern, significant overall at the .001 level of statistical significance, was found to be $L > I \geq C$.

TABLE XXI

RANK-ORDERING, HOMOGENEITY OF RESPONSE PATTERNS, AND ORDERING DISTANCE OF PARENTS AND PUPILS

Value Orientation Area		Parents (N=30)		Pupils (N=138)		Inter-Group Differences		
Item		Rank-Ordering	Homogeneity of Response (S/m)	Rank-Ordering	Homogeneity of Response (S/m)	Distance		χ^2 df = 2
I. Relational	1	L > C = I	0.26	C > I > L	3.01	-	x -	N/A
	7	L ≥ I > C	5.07	L > I ≥ C	37.87 ³	-	- -	ns
	11	C ≥ I > L	11.67 ²	C > I > L	42.30 ³	-	- -	ns
	14	L > C ≥ I	7.20 ¹	L > C > I	93.37 ³	-	- -	ns
	15	C ≥ L ≥ I	1.27	C ≥ L > I	25.32 ³	-	- -	ns
	18	I ≥ L > C	18.20 ³	I ≥ L > C	66.94 ³	-	- -	ns
	21	L ≥ C > I	15.27 ³	L > C ≥ I	36.57 ³	-	- -	ns
Relational Area Pattern		L > C ≥ I		L > C > I		0D		
Homogeneity of Preference (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 0		Within-Area Preferences Reaching .001 level . . . 3				

ns not significant

1 significant at the .05 level

2 significant at the .01 level

3 significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXI (continued)

Value Orientation Area	Item	Parents (N=30)		Pupils (N=138)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance	χ^2	df = 2
II. Time	3	P > F > Pa	22.40 ³	F > P > Pa	77.71 ³	x - -	N/A	
	5	P ≥ F ≥ Pa	1.87	F ≥ P ≥ Pa	0.83	x - -	N/A	
	10	F ≥ P > Pa	22.20 ³	F ≥ P > Pa	59.20 ³	- - -	ns	
	17	Pa ≥ P ≥ F	5.40	P ≥ F > Pa	33.89	- x -	N/A	
	19	F ≥ P > Pa	25.87 ³	F > P > Pa	136.36 ³	- - -	ns	
	24	F ≥ P ≥ Pa*	7.72 ¹	F ≥ Pa > P	24.03 ³	x - -	N/A	
Time Area Pattern		F ≥ P > Pa		F > P > Pa		OD		
Homogeneity of Prefer- ences (Binomial Analysis)		Within-Area Prefer- ences Reaching .001 level . . . 2		Within-Area Prefer- ences Reaching .001 level . . . 3				

ns not significant

¹ significant at the .05 level

² significant at the .01 level

³ significant at the .001 level

N/A not applicable

OD zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXI (continued)

Value Orientation Area	Item	Parents (N=30)		Pupils (N=138)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance		χ^2 df = 2
IV. Activity	4	Bc \geq B \geq D	1.85	Bc \geq B \geq D*	21.62 ³	-	-	nc
	8	Bc \geq D \geq B	3.80	Bc > D \geq B	48.03 ³	-	-	ns
	13	D \geq Bc > B	11.02 ²	D > Bc > B	158.69 ³	-	-	18.248 ³
	16	Bc \geq D > B	39.27 ³	Bc > D > B	99.14 ³	-	-	ns
	20	D \geq Bc > B	16.20 ³	D \geq Bc > B	95.03 ³	-	-	ns
Activity Area Pattern		Bc \geq D > B		Bc \geq D > B		0D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 2		Within-Area Preferences Reaching .001 level . . . 1				

ns not significant
N/A not applicable
1 significant at the .05 level
2 significant at the .01 level
3 significant at the .001 level
0D zero distance
1D one-distance difference
2D two-distance difference
3D three-distance difference

Item 11: Deciding How to Use Government Help

Although the degree of homogeneity of patterning differed, both parents and pupils chose the same rank-ordering in this item. The parents preferred Collaterality over Individualism over Lineality, ($C > I > L$) with overall homogeneity of responses significant at the .01 level. Pupils preferred Collaterality over Individualism over Lineality ($C > I > L$) somewhat more definitely, the overall pattern being homogeneous at the .001 level.

Item 14: Wage Work

Parents and pupils again demonstrated similar rank-ordering, although the pupils' responses were more homogeneous. The parents' preference order was found to be Lineality over Collaterality over Individualism ($L > C > I$), significant overall at the .05 level of confidence. Pupils chose the more homogeneous similar pattern $L > C > I$, significant overall at the .001 level. In both these choices, "Lineality" refers to valuing an organization, in what Kitchen has termed a "bureaucratic lineality"¹ orientation, rather than valuing an individual because of age or status in the community.

Item 15: Family Work Relations

This item revealed an almost total lack of patterning of any kind in the preferences of the parents. What slight ordering existed above what could be expected by chance answering indicated a preference for

¹*op. cit.*, pp. 74-76.

Collaterality over Lineality over Individualism ($C \geq L \geq I$). Pupils, in contrast, showed a strong rejection of the Individualism orientation in their preference for Collaterality over Lineality over Individualism ($C \geq L > I$) with a homogeneity of response patterns exceeding the .001 level of significance.

Item 18: Welfare Assistance

Parents and pupils chose the same ordering of preferences at a degree of homogeneity exceeding the .001 level of statistical significance. For both groups the pattern was found to be $I \geq L > C$. Only a slight preference for Individualism over Lineality was found, but a strong rejection of Collaterality was evident.

Item 21: Leaving Residential School

In this item, both parents and pupils ordered their preferences in the same manner, but with differing degrees of response patterning. Parents preferred Lineality over Collaterality over Individualism, but showed some doubt in choosing between the first two positions in the pattern $L \geq C > I$. Pupils found some difficulty in choosing between Collaterality and Individualism in the pattern $L > C \geq I$. However, in both groups the overall homogeneity of responses to the item exceeded the .001 level of significance.

Total Pattern: Relational Value Orientation Area

Combining the responses in the seven items in the Relational area produces a pattern of Lineality preferred over Collaterality preferred over Individualism ($L > C \geq I$), in the parent sample, and a similar, but

slightly more homogeneous pattern ($L > C > I$) in the pupil sample. Thus zero distance was found between groups in pattern type. The parental preference for Collaterality over Individualism failed to reach the .05 level of significance, whereas in the pupil sample all three pairs of alternatives reach the .05 level. In terms of item homogeneity, in the parent sample three items failed to reach the .05 level of significance, one reached .05, one, .01, and one, .001. In the pupil sample, one failed to reach the .05 level, but the remaining six reached the .001 level.

No significant χ^2 values were found in similarly-ordered items.

Discussion. The lack of homogeneity of responses to Item 1 was similar to that found by Kluckhohn with the same item in New Mexico in five cultures.² The Northern Alberta finding, especially when taken in conjunction with the ambivalence found in Items 7 and 15, might be interpreted, according to the Kluckhohn theory, to indicate a culture in a state of transition, judging by the virtually equal stress placed upon two alternative positions.³

An alternative explanation might be found for the lack of discriminatory power in Item 1 by examining the wording of the item, which is somewhat turgid. It could be argued that the essential difference between the process of long discussion leading to consensus, and

²Kluckhohn and Strodtbeck, *op. cit.*, p. 103.

³*Ibid.*, p. 25.

the process of limited discussion followed by an individualistic vote, is not clear in the item, where the operational concept in both the Collaterality and Individualism alternatives appears to be voting itself, rather than the process leading to the voting behavior. In the Collaterality orientation, voting is the formality that seals consensus; in the Individualistic orientation, it is the mechanism whereby even the smallest majority seek to impose their views upon the minority. Some doubt exists that this difference is conveyed by the wording of Item 1.

Seeking help in misfortune through one's own efforts seems to be preferred by the Indian people, rather than the reliance upon peers or immediate family members, as was customary in the past.

The shift away from relying on the advice of the older, respected members of the community appears to be present in the responses to the item concerning the use of government help in an offer of a recreation grant. It would seem that the Indian people in northern Alberta may gradually be adopting the non-Indian custom of discussion, then voting without waiting for consensus.

Although the expressed preference of the parents and pupils for working for a big company might mean a movement toward non-Indian occupational aspirations, it might also be interpreted as a desire for the most realistic way to get the material comforts which Indians covet.

The degree of homogeneity of response among the pupils, favoring Collaterality as the second-order choice, may be an indication of the power of the peer culture, but a power which is insufficient to outweigh

the dominant preference for Lineality.

II. TIME VALUE ORIENTATION AREA

The three possible orientations in the Time area are: Past (Pa), Present (P), and Future (F).

Item 3: Child Training

Parents showed a clear preference in this item for a Present over Future over Past ordering ($P > F > Pa$), in contrast to the pupils' expressed preference for Future over Present over Past ($F > P > Pa$). In both groups the overall homogeneity of responses to the items exceeded the .001 level of statistical significance. The patterns of the two groups represent a one-distance difference between parents and pupils.

Item 5: Expectations About Change

Parents displayed a preference for Present over Future over Past ($P \geq F \geq Pa$), while pupils chose the pattern Future over Present over Past ($F \geq P \geq Pa$). The overall item homogeneity of patterning was slightly above chance for the parents, and almost completely random for the pupils. The patterns show a one-distance difference in type.

Item 10: Ideas About Life

Parents and pupils agreed unanimously on the type and homogeneity of responses in this item. The pattern chosen was Future preferred to Present preferred to Past ($F \geq P > Pa$). The rejection of the Past orientation was marked in both groups.

Item 17: Changes in Church Services

A sharp cleavage between parents and pupils was found in this item. Parents chose Past preferred over Present preferred over Future ($Pa \geq P \geq F$), while pupils chose Present preferred over Future preferred over Past ($P \geq F > Pa$). Homogeneity of parents' responses failed to reach the .05 level, while pupils' responses were homogeneous beyond the .001 level. This is the only item in the complete study where the Past orientation reached a dominant position.

Item 19: Going Away to School

Parents chose the same ordering as pupils, but with a different degree of homogeneity of response. The parents' choice was Future preferred to Present preferred to Past ($F > P > Pa$), while pupils chose $F > P > Pa$. Item homogeneity exceeded the .001 level of significance in both samples, markedly so for the pupils. The firm rejection of the Past orientation was again noted.

Item 24: Sudden Community Wealth

Parents chose Future preferred over Present preferred over Past ($F \geq P \geq Pa^*$) at a homogeneity level below .05. Pupils chose Future over Past over Present ($F \geq Pa > P$), at the .001 level of item homogeneity. Parents were ambivalent about two of the three pairs of alternatives, while pupils were somewhat indecisive about the choice between Future and Past, and rejected the preference for Present over Future.

Total Pattern: Time Value Orientation Area

In sum, combining the preferences in the six items in the Time value orientation area produced a pattern for the parents of Future over Present over Past ($F \geq P > Pa$), and for the pupils, $F > P > Pa$. This produced zero distance between the two samples. In the preference pairs, parents' choices did not reach the .05 level of significance in the Future over Present alternative. In all three pairs of pupil alternatives, homogeneity reached the .05 level.

Examination of individual item rank-orderings shows several distances between groups. A one-distance difference was found in Item 3 (Child Training), and Item 5 (Expectations about Change). A two-distance difference was found in Item 17 (Changes in Church Services). Inspection of overall item homogeneity of response shows that in the parent sample, two items did not reach the .05 level, one reached the .05 level, and three reached the .001 level. In the pupil sample, one item did not reach the .05 level of significance, but five exceeded .001.

No significant χ^2 values were found between similarly-ordered items.

Discussion. Beaglehole⁴ has observed that child training is crucial in the context of education of native children. Discussing the problems of Maori education, he held that the solutions lay not in tinkering with the curriculum, but in changing child rearing practices. Item 3 in this study reveals a strong preference among Indian parents for

⁴Ernest Beaglehole, "Character Structure," *Psychiatry: Journal of the Biology and Pathology of Interpersonal Relations*, VII (May, 1944), 155.

a Present orientation in child-rearing practice, in contrast to their children's preferences for a Future orientation. The choice of the pupils may possibly be attributed to age, since teachers and administrators chose the Present orientation, similar to the Indian parents. It could be hypothesized that children look upon the Present orientation as catering to their immaturity, while a Future orientation is congruent with their total outlook upon life.

When the schedule was being administered to parents, a laugh or a smile were frequent responses to the item concerning change. The interpreter explained later, in this connection, that:

You are using the wrong question. It starts off, 'Three young people were talking about what they thought they would have after they left school and started raising a family . . . ' Well, the parents can't answer it because they aren't young people in school, and the young people in school can't answer it because they haven't left school and started raising a family yet.⁵

Presumably the thought processes of the northern Alberta Cree render it difficult for them to respond to questions involving a situation which requires them to adopt a role which is impossible or inappropriate for them. There is some likelihood, therefore, that the item lacks a desirable degree of validity for the Indian group to which it was given. Conceivably, the original Kluckhohn item, using the phrase "one day" rather than the more specific "after they left school and started raising a family" of this study crossed the cultural boundary because of its higher level of generality, a pivotal point in the Kluckhohn theory.⁶

⁵Clara Yellowknee, personal interview July 18, 1966.

⁶Kluckhohn and Strodtbeck, *op. cit.*, p. 92.

Whatever the explanation for the ambiguous responses to the item, the interpreter's comment would appear to have some considerable significance in learning situations where the assumption is made that Indian pupils can readily picture themselves in another age bracket, or in an occupation not known in their home community.

The very low frequency of choices for the Past orientation in the "Going Away to School" item, especially in the pupil sample, might be interpreted that the Wabasca community is prepared to move out of its present circular, low socio-economic condition. Possibly the opening in 1963 of the Grouard Vocational School 160 miles away, and the attendance of a number of Wabasca pupils at the school, could have influenced the preferences of the pupils and parents in 1966.

Inferences from the responses to the "Sudden Community Wealth" item must be made with caution, since the item appears to contain a measure of the bureaucratic lineality concept in addition to its major emphasis upon the Time value orientation area. Kluckhohn mentions the difficulties of constructing discrete Time items. However, the item does reveal that the Indian people in Wabasca possess an awareness of the need for planning in the event of a large sum of money becoming available to the community in a lump sum.

The most important finding in the Time value orientation area was the strong rejection of the Past orientation, and the emergence, even hesitantly, of a Future orientation among parents and pupils.

III. MAN-NATURE VALUE ORIENTATION AREA

The three possible positions in the Man-Nature value orientation area are: Subject-to-Nature (S), Harmony-with-Nature (H), and Mastery-over-Nature (M).

Item 2: Length of Life

Parents showed considerable divergence from pupils in this item, both in type of preference and degree of homogeneity of response. Parents chose Mastery in preference to Harmony, and both in preference to Subject-to-Nature, in the pattern $M \geq H \geq S$. None of these preferences reached the .05 level of statistical significance, however. Pupils, on the contrary, showed a considerable degree of homogeneity in their ranking of Subject-to-Nature over Mastery-over-Nature which in turn was preferred over Harmony-with-Nature, in an $S > M > H$ pattern. The two patterns display a two-distance difference in type.

Item 6: Facing Conditions

Again in this item, parents differed from pupils in the rank-ordering of their preferences. Parents placed Harmony as the dominant value orientation, followed by Subject-to-Nature and Mastery-over-Nature in an $H > S \geq M$ pattern. The overall homogeneity of patterning lay at the .05 level of confidence. For the pupils, the pattern emerged as Subject-to-Nature preferred over Harmony which in turn is preferred to Mastery-over-Nature, for an $S > H \geq M$ array, homogeneous overall at the .01 level of confidence. The preference of the pupils for the Subject-to-Nature orientation both in this item and Item 2 is a point of interest. The

patterns display a one-distance difference in type.

Item 9: Belief in Control

Similar rankings were found in this item for both parents and pupils, but with some difference in homogeneity of responses. Parents were equally divided between Harmony and Subject-to-Nature as their first choice, but preferred both to Mastery-over-Nature, in a pattern $H = S > M$. The overall pattern was significant at the .05 level of confidence. Pupils, in contrast, displayed considerable homogeneity in their ranking, which, though similar in order, reached the .001 level of significance for a pattern of Harmony over Subject over Mastery ($H > S > M$).

Item 12: Use of Traplines

Once again, congruence in type of ordering was found in this item, but some difference of homogeneity of response pattern was noted. Parents gave first preference to Mastery-over-Nature, followed closely by Harmony-with-Nature, then Subject-to-Nature, for an $M \geq H > S$ pattern, significant overall at the .01 level. Pupils were more decisive in their first preference of Mastery-over-Nature, followed by Harmony-with-Nature and Subject-to-Nature for an $M > H > S$ pattern, significant overall at the .01 level of confidence.

Item 22: Hunting, Fishing, and Trapping

This item produced a one-distance difference between parents and pupils. The parents' pattern was Mastery-over-Nature preferred to Harmony-

with-Nature preferred to Subject-to-Nature ($M > H \geq S$). Overall pattern homogeneity was significant at the .01 level. Pupils preferred Mastery-over-Nature to Subject-to-Nature to Harmony-with-Nature, for an $M \geq S > H$ pattern statistically significant overall at the .01 level.

Total Pattern: Man-Nature Value Orientation Area

Combining responses to the five items in the Man-Nature area produced a pattern of Mastery-over-Nature preferred to Harmony-with-Nature preferred to Subject-to-Nature ($M \geq H > S$), for the parent sample. Pupils, in contrast, chose Subject-to-Nature preferred to Mastery-over-Nature preferred to Harmony-with-Nature ($S > M \geq H$). This represents a two-distance difference in patterning between parents and pupils. In terms of area homogeneity of response, both parents' and pupils' preferences for Mastery over Harmony failed to reach the .05 level.

Examining the individual items for homogeneity of overall item patterning reveals that in the parent sample, one item failed to reach the .05 level of significance, two reached .05, and two reached .01. In the pupil sample, two items were homogeneous at the .01 level, and three at the .001 level.

No significant differences in χ^2 values between similarly-ordered items were found.

Discussion. The fatalism of the pupils in their choice of the Subject-to-Nature preferences has already been noted in Chapter V,⁷

⁷*Supra*, p. 118.

where it was conjectured that the orientation may be a factor of age and immaturity. The implications of this finding for assumptions underlying health education would appear to be worth exploring, especially in view of the great homogeneity of preference for "Subject-to-Nature" in the Length of Life item. The preference of the pupils for Harmony-with-Nature as the dominant position in the Belief in Control item is difficult to interpret, particularly in view of the parents' equal preference for Harmony and Mastery. Possibly the ordering of the pupils (Harmony-Subject-Mastery) represents a process of excluding two disliked positions, leaving the first-order position to Harmony-with-Nature. It could be argued that this results from adolescent feelings of inadequacy causing rejection of the Mastery alternative, and rebellion against their present position in society causing rejection of the Subject-to-Nature position. If these conjectures are valid, Harmony-with-Nature was a least bad choice in a series of difficult choices.

The findings in the item concerning use of traplines could indicate acceptance by the Indian of improvement through technology, but the strength of the Harmony preference is still noticeable. Pupils made the Mastery-over-Nature position more popular than their parents, indicating a possible movement towards white values. The choice of both parents and pupils for occupations relatively independent of the effects of nature could reflect again their desire for material comforts which regular employment can bring.

To summarize, although a two-distance difference exists between pupils and parents in the Man-Nature area, caution must be exercised

in making inferences from the finding until the effect of age upon the responses is more thoroughly investigated.

IV. ACTIVITY VALUE ORIENTATION AREA

The three possible orientations in the Activity area are: Being (B); Being-in-Becoming (Bc), and Doing (D).

Item 4: Job Choice

This item deals with job choice from the point of view of the employee and his preference for different kinds of employers. Very low homogeneity of response was found among the parents, whose pattern emerged as Being-in-Becoming preferred over Being preferred over Doing ($Bc > B \geq D$). Neither the internal preference pairs nor the overall item homogeneity reach the .05 level of confidence. Pupils, in contrast, clearly rejected the Doing orientation in selecting an employer with the pattern Being-in-Becoming preferred over Being preferred over Doing ($Bc \geq B \geq D^*$) in a pattern with overall significance at the .001 level.

Item 8: Ways of Living

The parents' rank-ordering was found to be Being-in-Becoming over Doing over Being ($Bc \geq D \geq B$), but lacking in sufficient overall homogeneity to reach the .05 level of significance. Pupils chose the same ordering, but somewhat more homogeneously, in the $Bc > D \geq B$

pattern, with a total patterning homogeneity at the .001 level. Parents were indecisive in all three pairs of alternative choices in the item, whereas the pupils were uncertain only about the preference for Doing over Being.

Item 13: Housework

The largest difference in homogeneity of patterning between parents and pupils in the complete schedule was found in this item. Both samples chose the same rank-ordering (Doing over Being-in-Becoming over Being) significant in overall homogeneity of response patterns at the .01 level for parents, but at many times the magnitude required for .001 in the pupil sample.

A χ^2 of 18.248 was found between the two groups on this item, significant at the .001 level for two degrees of freedom. Symbolically, the parents' pattern was found to be $D \geq Bc > B$, the pupils', $D > Bc > B$.

Item 16: Non-Working Time

Again, pupils and parents chose the same rank-ordering for this item (Being-in-Becoming preferred to Doing preferred to Being). Both patterns displayed homogeneity overall at the .001 level, but the parents were not firm in their choice of Being-in-Becoming over Doing. Pupils' choices among the alternatives were homogeneous beyond the .05 level. Symbolically, the parents' pattern was $Bc \geq D > B$, the pupils', $Bc > D > B$.

Item 20: Women in the Modern World

Parents and pupils again agreed on the ordering of their preferences, and also on the degree of overall and within-item homogeneity. The pattern chosen was Doing preferred to Being-in-Becoming preferred to Being ($D \geq Bc > B$). The overall confidence level for the response patterns lay beyond .001 for both samples.

Total Pattern: Activity Value Orientation Area

Combining the frequency of responses to the five items in the Activity area produced congruence both of type and of homogeneity of response patterns of parents and pupils. The final pattern can be represented as $Bc \geq D > B$, with a zero distance between the two samples. In terms of item homogeneity, once again the parents were more indecisive than the pupils. Two parental items failed to reach the .05 level of confidence in overall homogeneity of pattern, one reached the .01 level, and two, the .001 level. In contrast, all five pupil items displayed homogeneity of choice exceeding the .001 level. Item 13 (Housework) was noteworthy for the magnitude of the homogeneity finding and the significant χ^2 value in the test for independence from the parental choice.

Discussion. The major point of interest in the Activity area is the preference of both parents and pupils for the self-actualizing concept of "Being-in-Becoming." The familiar stereotype of the lazy Indian interested only in immediate gratification of his impulses may be quite inaccurate. Throughout the area, the Being orientation was quite unpopular. Whatever ambivalence existed was found in the choice between "Being-in-Becoming" and Doing.

Item 4 reveals the inconsistency of the outlook of the Indian in northern Alberta in connection with wage employment. In Item 14 (Wage Work) responses of both parents and pupils revealed homogeneity in preference for working for a large company, yet in Item 4 they prefer, at the same time, an understanding "boss" who will allow them privileges of absenteeism as long as they are trying to improve themselves when they are at work. Their second choice is for the indulgent boss, and their third for the "doing" employer. It would appear that the combination of security of a big company and lenient or indulgent supervision might be difficult to find, especially in the types of occupations in which the Indian people are normally employed. It could be hypothesized that an internal value conflict is thus generated in the Indian which almost paralyzes him from seeking employment, much as he may desire it.

The great divergence between parents and pupils in the Housework item is of interest because of the traditionally lax homemaking in Indian homes in rural settings. Although this is not universal, it is prevalent in most homes. Possibly the Indian pupils, as a result of the middle-class non-Indian housekeeping standards in schools in Northland Division, together with instruction in Home Economics for the older girls, are beginning to expect higher standards of homemaking from their parents.

The findings from the Non-Working Time item lead to speculation concerning the actual behavior of the Indian people in the north as opposed to the expressed value orientation towards self-improvement. One interpretation might be that communities such as Wabasca are ready for

leisure-time activities of a productive nature.

The preference of the parents and pupils in Item 20 for self-actualizing activities for women is a specific finding in the general "Non-Working Time" behavior sphere. However, the stated preferences of the Indian people are not in congruence with observed behavior, in terms of school drop-outs at the Grade VIII and IX level, together with the incidence of early marriages. Possibly the attitudes towards school, together with the lack of opportunities for constructive activity, result in overt behavior which is actually in conflict with a held value. Another possible explanation is that the value orientation expressed is not real, but is lip-service, or a type of defensive reaction. This type of limitation in the method is discussed by Kluckhohn, and admitted possible. The reduction of this possibility is accomplished through items constructed at a very high level of generalization.⁸

To summarize, the existence of a considerable degree of homogeneity of responses favoring the Being-in-Becoming and Doing value orientations may be another indication of a culture in transition, a culture moving from traditional native values to those of the dominant, non-Indian society.

V. TESTING HYPOTHESIS FOUR

Hypothesis Four predicted significant differences in value

⁸Kluckhohn and Strodtbeck, *op. cit.*, pp. 94-96.

orientation patterns between Indian parents and adolescent Indian pupils. Reference to Table XXII, a summary of the type and degree of homogeneity of response patterns in the two groups, reveals the following differences:

A.	<u>Type Differences in Value Orientations</u>	
	Man-Nature Area (First-order choices)	1 (2D)
B.	<u>Homogeneity of Response Differences</u>	
1.	Homogeneity of item patterning (S/m)	
	Net difference between groups in items failing to reach the .05 level of statistical significance . .	6
2.	Homogeneity of area patterning (binomial analysis)	
	Net difference in pairs of alternatives at or above the .001 level of significance	3

Applying the decision rule given in Chapter IV,⁹ the null hypothesis of no difference between parent and pupil samples must be rejected. Both Criterion A and Criterion B reveal sufficient differences to conclude that the value orientation patterns of Indian parents differ significantly from those of adolescent Indian pupils.

Hypothesis Four was therefore strongly supported.

VI. SUMMARY

This chapter has presented the findings concerning the variations in value orientation patterns of Indian parents and adolescent Indian pupils, together with the results of the testing of Hypothesis 4.

⁹*Supra*, p. 112.

TABLE XXII

DIFFERENCES IN VALUE ORIENTATIONS OF PARENTS AND PUPILS
BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Type Differences		Homogeneity of Response Pattern Differences				
Value Orientation Area	Distance Differences	Number of Items Below .05 Level of Significance (S/m)		Number of Area Pairs of Alternatives at or Above .001 Level of Significance (Binomial)		
		Parents	Pupils	Net Difference Par. - Pupils	Parents	Pupils
Relational	Nil	3	1	2	0	3
Time	Nil	2	1	1	2	3
Man-Nature	2-D	1	0	1	0	0
Activity	Nil	2	0	2	2	1
Total	One 2-D	8	2	6	4	7
						-3

In the Relational value orientation area, parents and pupils chose Lineality over Collaterality over Individualism. Parents' responses demonstrated a noticeable lack of homogeneity. A type difference in pattern was found between groups in the item Choice of Representative, although the homogeneity of responses in both groups was quite low. The rejection of the Individualism orientation for both parents and pupils was the most important finding of this area.

In the Time value orientation area, both groups chose Future over Present over Past. Parents as a group were quite indecisive about their preferences in some items. Type differences were found in the items Child Training, Expectations about Change, Changes in Church Services, and Sudden Community Wealth. The firm rejection of the Past orientation was noted.

In the Man-Nature value orientation area, a type difference was found between parents and pupils. Parents chose Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature. Pupils chose Subject-to-Nature over Mastery-over-Nature over Harmony-with-Nature. Type differences were found in the items Length of Life, Facing Conditions, and Hunting, Fishing, and Trapping.

In the Activity area, parents and pupils chose Being-in-Becoming over Doing over Being, with considerable ambivalence between Being-in-Becoming and Doing as the dominant orientation.

Testing Hypothesis 4 produced sufficient evidence to conclude that under both Criterion A and Criterion B, the value orientation pattern of Indian parents differs significantly from that of adolescent Indian pupils.

CHAPTER VII

VARIATIONS IN VALUE ORIENTATION PATTERNS OF PARENTS AND TEACHERS

Hypothesis Five predicted significant differences between the value orientation patterns of Indian parents and those of teachers and administrators. Table XXIII tabulates the item-by-item findings for each group, showing rank-ordering of preferences, distance differences between the rank-orderings of groups, homogeneity of overall item responses (Kendall's "S" divided by number of respondents), homogeneity of within-area preferences for pairs of alternatives (measured by binomial analysis), and χ^2 values for differences in homogeneity of item patterning in similarly-ordered items. In view of the detailed discussion in Chapter VI of the value orientations of the parent sample, this chapter will focus chiefly on findings concerning teachers and the differences between these and the parental patterns.

I. RELATIONAL VALUE ORIENTATION AREA

The three possible orientations in the Relational area are: Lineality (L), Collaterality (C), and Individualism (I).

Item 1: Choice of Delegate

Although this item produced only the faintest trace of patterning in the parent sample in the ordering Collaterality preferred over Individualism equally preferred with Lineality ($C \geq I = L$), teachers displayed more decisiveness in the same ordering ($C \geq I > L$). Although there was some hesitancy in selecting Collaterality over Individualism,

TABLE XXIII

RANK-ORDERING, HOMOGENEITY OF RESPONSE PATTERNS, AND ORDERING DISTANCE OF PARENTS AND TEACHERS

		Parents (N=30)		Teachers (N=129)		Inter-Group Differences		
Value Orientation Area	Item	Rank-Ordering	Homogeneity of Response (S/m)	Rank-Ordering	Homogeneity of Response (S/m)	Distance		χ^2
						1	2 3	
I. Relational	1	C \geq I = L	0.26	C \geq I > L	38.34 ³	-	- -	ns
	7	L \geq I > C	5.07	I \geq L > C	17.04 ³	x	- -	N/A
	11	C \geq I > L	11.67 ²	C > I \geq L ³	21.28 ³	-	- -	ns
	14	L > C \geq I	7.20 ¹	I \geq L \geq C*	11.83 ²	-	x -	N/A
	15	C \geq L \geq I	1.27	I \geq C > L	23.48 ³	-	x -	N/A
	18	I \geq L > C	18.20 ³	I > L > C	98.42 ³	-	- -	ns
	21	L \geq C > I	15.27 ³	L > C > I	138.21 ³	-	- -	ns
Relational Area Pattern		L > C \geq I		I > L > C		2D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level	. . . 0	Within-Area Preferences Reaching .001 level	. . . 0			
		ns not significant		N/A not applicable				

¹significant at the .05 level
²significant at the .01 level
³significant at the .001 level

0D zero distance
1D one-distance difference
2D two-distance difference
3D three-distance difference

TABLE XXIII (continued)

		Parents (N=30)		Teachers (N=129)		Inter-Group Differences		
Value	Item	Rank-Ordering	Homogeneity of Response (S/m)	Rank-Ordering	Homogeneity of Response (S/m)	Distance		χ^2 df = 2
II. Time	3	P > F > Pa	22.40 ³	P > F > Pa	185.88 ³	-	- -	47.08
	5	P ≥ F ≥ Pa	1.87	F > P > Pa	113.63 ³	x	- -	N/A
	10	F ≥ P > Pa	22.20 ³	P > F > Pa	147.45 ³	x	- -	N/A
	17	Pa ≥ P ≥ F	5.40	P ≥ F > Pa	53.89 ³	-	x -	N/A
	19	F ≥ P > Pa	25.87 ³	F > P > Pa	215.98 ³	-	- -	ns
	24	F ≥ P ≥ Pa*	7.72 ¹	F > Pa ≥ P	128.48 ³	x	- -	N/A
Time Area Pattern		F ≥ P > Pa		F > P > Pa		0D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 2		Within-Area Preferences Reaching .001 level . . . 3				

ns

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXIII (continued)

		Parents (N=30)		Teachers (N=129)		Inter-Group Differences				
Value	Orientation	Area	Item	Rank-Ordering	Homogeneity of Response (S/m)	Rank-Ordering	Homogeneity of Response (S/m)	Distance	χ^2	df = 2
III. Man-Nature	2			M \geq H \geq S	5.07	M > H > S	86.73 ³	- - -	ns	
	6			H > S \geq M	7.47 ¹	M > H \geq S	34.56 ³	- x -	N/A	
	9			H = S > M	7.27 ¹	M > H > S	29.10 ³	x - -	N/A	
	12			M \geq H > S	10.40 ²	M > H > S	98.42 ³	- - -	6.38 ¹	
	22			M > H \geq S	12.95 ²	M > H \geq S	37.49 ³	- - -	ns	
Man-Nature Area Pattern				M \geq H > S		M > H > S		0D		
Homogeneity of Preferences (Binomial Analysis)				Within-Area Preferences Reaching .001 level . . . 0		Within-Area Preferences Reaching .001 level . . . 3				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXIII (continued)

Value Orientation Area	Item	Parents (N=30)		Teachers (N=129)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance		χ^2 df = 2
IV. Activity	4	Bc \geq B \geq D	1.85	D > Bc > B	53.05 ³	-	x -	N/A
	8	Bc \geq D \geq B	3.80	Bc > D > B	70.13 ³	-	- -	ns
	13	D \geq Bc > B	11.02 ²	D > Bc \geq B	22.14 ³	-	- -	ns
	16	Bc \geq D > B	39.27 ³	Bc > D > B	65.14 ³	-	- -	ns
	20	D \geq Bc > B	16.20 ³	Bc > B \geq D	122.52 ³	-	x -	N/A
Activity Area Pattern		Bc \geq D > B		Bc > D > B		OD		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 2		Within-Area Preferences Reaching .001 level . . . 3				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

OD zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

there was little doubt as to the rejection of Lineality. Overall item patterning responses lay beyond the .001 level of confidence, for the teachers, and almost at chance answering for the parents.

Item 7: Help in Misfortune

Teachers chose Individualism preferred over Lineality preferred over Collaterality ($I \geq L > C$) in this item, demonstrating some ambivalence in their first-order choice between Individualism and Lineality. The parents chose Lineality preferred over Individualism preferred over Collaterality ($L \geq I > C$). Total item patterning did not reach statistical significance for the parents, but exceeded .001 for the teachers. The orderings represent a one-distance difference in pattern type.

Item 11: Deciding How to Use Government Help (Allocation of Recreation Grant)

Agreement in rank-ordering was noted both among parents and teachers, but with differing degrees of homogeneity of response. Teachers chose the $C > I \geq L$ pattern, parents, $C \geq I > L$. Overall item homogeneity of patterning was at the .001 level for teachers and at the .01 level for parents.

Item 14: Wage Work

Teachers in this item preferred Individualism over Lineality over Collaterality ($I \geq L \geq C^*$), whereas parents chose Lineality over Collaterality over Individualism ($L > C \geq I$). Overall item homogeneity of response lay at the .01 level for teachers and at the .05 level for

parents. This is the only item in the schedule in which the homogeneity of pattern responses of the teachers dropped below the .001 level of significance. Once again, the Lineality concept in this item is that of bureaucratic lineality, which the parents gave the dominant position, but which teachers placed second in their preference order. The greatest homogeneity of the teachers' responses lay in the frequency with which they chose Individualism over Collaterality. The difference between teachers and parents in this item produced a two-distance difference in type of pattern.

Item 15: Family Work Relations

Teachers again differed quite sharply from parents in their rank-ordering of this item as Individualism over Collaterality over Lineality ($I \geq C > L$), in contrast to the parents' ordering $C \geq L \geq I$. Teachers favored Individualism for the dominant orientation, but Collaterality lay fairly close in frequency of preference. Both were clearly preferred over Lineality. The parents were very indecisive in this item, their pattern reaching only slightly above chance, whereas the teachers' pattern homogeneity lay at the .001 level of confidence. The difference in rank-ordering produced a two-distance difference in type of pattern between teachers and parents.

Item 18: Welfare Assistance

Similar orderings were found in this item for both parents and teachers, and homogeneity of responses exceeded the .001 level for the total item. Internally, some differences in homogeneity were observed,

since the teachers were definite in their $I > L > C$ pattern, but the parents displayed some ambivalence in their choice between Individualism and Lineality in the $I \geq L > C$ pattern. The placement of Individualism in the dominant position in both samples is of interest.

Item 21: Leaving Residential School

Parents and teachers again chose the same rank-ordering (Lineality over Collaterality over Individualism) in this item, but with considerable difference in homogeneity of patterning in the total item. The teachers' pattern became $L > C > I$, and the parents', $L \geq C > I$. The homogeneity of pattern responses in the teacher sample lay at many times the magnitude required for .001 statistical significance. The parents' responses produced homogeneity at the .001 level of statistical significance. The strong preference for Lineality over Individualism is the main point of interest in this item, as well as the parental wavering between Lineality and Collaterality for the dominant position.

Total Pattern: Relational Value Orientation Area

Combining the frequencies of preferences for the various alternatives produced an area ordering of Lineality over Collaterality over Individualism ($L > C \geq I$) for the parents, and $I > L > C$ for the teachers. This produces a two-distance difference in type of value orientation pattern between the two groups. In terms of homogeneity of response patterns by items, parents as a group were quite indecisive in this area, failing to reach the .05 level of confidence on three items, reaching

.05 on one item, .01 on one item, and .001 on two items. In contrast, the teachers' response patterns produced homogeneity at the .01 level on one item, and at .001 on the remaining six. Apparently the value orientation patterns of teachers in this area are generally homogeneous, especially the item on leaving residential school.

One one-distance and two two-distance differences were found between the two groups on individual items. This, taken together with the area difference of the two-distance magnitude, and the differing degrees of homogeneity of patterning in the two groups, gives evidence of considerable difference in value orientation patterns of parents and teachers.

No significant χ^2 values were found between similarly-ordered items.

Discussion. Teachers' preferences for Lineality and Individualism were almost exactly equal in the item on Help in Misfortune, which could indicate the existence in this sample of strong kinship ties.

Some difficulty was experienced in the phraseology of the item concerning allocation of recreation grant, as the Edmonton teachers participating in the Pilot Study demanded greater specificity about the concept "older, important leaders." Adapted wording was therefore used for the teacher item, and some caution is indicated in making inferences from this item, especially from the second and third-order choices. The emphasis upon discussion and consensus prior to decision-making in both parent and teacher samples could be indicative of the

continuing possibility of involving the Indian people themselves in the solution of their problems.

The findings in the item on Wage Work give rise to considerable speculation about teachers' values. Their first choice of Individualism as the preferred value would seem to conflict with their occupational status as members of a large organization. Possibly they feel that their freedom of action in their own classroom meets their need for individualistic employment. The second-order preference for Lineality may reflect the need for the security of a large organization. Teaching might be a compromise between the apparent conflict existing between Individualism and Lineality, giving the teacher the feeling of being his own boss (in the classroom) without running the risk of being his own employer. Rejection of Collaterality could indicate that many teachers may not be suitable for team teaching assignments.

The preference for Collaterality in the item concerning Family Work Relations may again indicate that strong kinship ties still exist in middle-class North American white society, contrary to the image of the "nuclear family" propounded by some sociologists. The communication potential of the automobile today may make Collaterality viable, even though relatives may live some distance apart.

The preference of both parents and teachers for Individualism in the item concerning Welfare Assistance may indicate that the white culture is now joining the Indian in gaining a certain prestige through being able to obtain public assistance in times of need.

The popularity of the Lineality preference in the item "Leaving

Residential School" was greatest among parents, but only slightly ahead of Collaterality, while with pupils the uncertainty lay between a second-order Collaterality and a third-order Individualism. Teachers' patterns were much more definite, which indicates that many assumptions made about counselling procedures may need re-examination. Ray, Ryan, and Parker¹⁰ found that Alaskan dropouts seldom talked over their residential school problems with their parents. It would appear that actual discussion practices among Indian parents and pupils should be assessed very closely before program development proceeds in the guidance and counselling fields.

In summary, the findings in the Relational area for parents and teachers could indicate, as Kluckhohn points out,¹¹ that severe problems of adjustment are taking place for the subculture because of the demands being made upon the Indian people for a rapid shift in the area.

II. TIME VALUE ORIENTATION AREA

The three possible positions in the Time value orientation area are: Past (Pa), Present (P), and Future (F).

Item 3: Child Training

Although parents and teachers rank-ordered their preferences in the same manner, Present over Future over Past ($P > F > Pa$), a rather

¹⁰Charles K. Ray, Joan Ryan, and Seymour Parker, *Alaskan Native Secondary School Dropouts* (College, Alaska: University of Alaska, 1962), p.333.

¹¹Kluckhohn and Strodbeck, *op. cit.*, p. 47.

large difference in homogeneity of total item patterning was found. The patterns of both groups displayed S/m values lying beyond the .001 level of significance, but the S/m quantity for the teacher sample was many times the magnitude required for .001. The χ^2 test for association or independence supported the size of the difference with a finding of 47.08, significant at the .001 level for two degrees of freedom.

Item 5: Ideas About Change

The teachers' pattern in this item proved to be Future over Present over Past ($F > P > Pa$), with very considerable homogeneity of patterning at the .001 level. Parents chose the Present over Future over Past ($P \geq F \geq Pa$) ordering, but with responses barely above what could be expected by chance alone. Congruence of values is noted, however, in the fact that both samples placed the Past orientation in the third-order position. The patterns of the two groups display a one-distance difference in type.

Item 10: Ideas About Life (Philosophy of Life)

The teachers' pattern in this item emerged as a very homogeneous Present over Future over Past ($P > F > Pa$), in contrast to the considerably less homogeneous pattern of the parents-- $F \geq P > Pa$. While both groups displayed homogeneity exceeding the .001 level of statistical significance, the teachers' responses produced S/m quantity many times that required for .001. The parents were somewhat undecided about their preference for Future over Present, so that the largest proportion of

homogeneity in their rank-ordering came from the rejection of the Past position. The respective patterns of the two groups create a one-distance difference in type.

Item 17: Changes in Church Services (Ceremonial Innovation)

Teachers' pattern of responses differed both in type and in degree of homogeneity in this item from those of parents. The teachers' pattern was found to be Present over Future over Past, ($P \geq F > Pa$), but the parents chose $Pa \geq P \geq F$. Once again, the homogeneity of responses differed considerably in the total item, with the parents failing to display patterning at the .05 level, but the teachers demonstrating a pattern beyond the .001 level. The orderings represent a two-distance difference in type of pattern between the groups.

Item 19: Going Away to School

Agreement was found on the rank-ordering (Future over Present over Past) of the two groups, the teachers preferring $F > P > Pa$, the parents $F \geq P > Pa$. However, the largest S/m value in the study was found in the teachers' responses, even though the values for both groups exceeded the .001 level of statistical significance. The strong rejection of the Past orientation was the distinguishing feature of the findings. Parents were somewhat uncertain, however, between Present and Future as their preference.

Item 24: Sudden Community Wealth (Sudden Community Prosperity)

Parents and teachers differed both in their pattern type and in

the homogeneity of the patterning in this item. The teachers' preferences emerged in the Future over Past over Present ($F > Pa \geq P$) pattern, the parents', $F \geq P \geq Pa^{*+}$. In the parent group, homogeneity of responses reached the .05 level of statistical significance, but in the teacher group the very large preference for the Future orientation produced patterning homogeneity substantially exceeding that required for the .001 level of confidence. Teachers were somewhat undecided in the preference between Past and Present orientations, but clearly rejected them both in favor of the Future position. Parents, in contrast, were undecided about the choice between both Future and Present and between Present and Past, but were fairly homogeneous in their preference for Future over Past. The one-distance difference in type indicates some conflict of values between Indian and non-Indian in this community, but a considerable measure of agreement on the dominant orientation to the Future.

Total Pattern: Time Value Orientation Area

Combining the responses to the six items in this value orientation area produced similar patterns, but of differing homogeneity, for the parent and teacher samples. For parents, the pattern was $F \geq P > Pa$, and for teachers, $F > P > Pa$. Zero distance was therefore found between the area patterns, but three one-distance and one two-distance differences were found in individual items. In terms of homogeneity of item responses, in the parent sample two items failed to reach the .05 level of significance, one reached the .05 level, and three reached the .001

level. Among the teachers, all items produced S/m magnitudes well in excess of that required for .001 statistical significance.

One significant χ^2 value was found between similarly-ordered items.

Discussion. The rather large discrepancy in homogeneity of pattern responses between parents and teachers is probably the most meaningful finding of this Time value orientation area. While in sum both groups placed Future as their dominant value orientation, parents were not too firm in their choice of Future over Present. The unpopularity of the Past position could indicate that Indian parents in Wabasca are moving towards non-Indian values. The strong preference of the teachers for the Present orientation in the item Child Training could conceivably be a recognition of the swiftness of social change and desire to see their children prepared to cope now, rather than try to prepare for a most uncertain future.

The scepticism of the Indian people concerning change is noted in the responses to the item concerning change, where their responses were most vacillating. Teachers, in contrast, looked forward firmly to a better future. The Present orientation of the teachers in the Philosophy of Life item could be argued to support the view being put forward by some sociologists that western industrial societies are moving away from their Future orientation to a Present orientation, marked by the rapidly-rising per capita expenditures for status symbols, luxury goods, and recreational services. Teachers may have chosen the

Present orientation because of rejection of the phrasing of part of the Future position in the item which suggested that persons should ". . . give up many things now so that the future will be better." Teachers have much to give up, Indians, little.

The stereotype of the average Indian as a person who takes scant thought for tomorrow receives little support from this study. The Past orientation was decisively rejected. Present received only two first choices, and Future received three. Even considering the rather large gap in homogeneity of preference for the Future between the Indian and the teachers, it could be postulated that the Wabasca Cree are closer to a non-Indian Time value orientation pattern than had been suspected.

III. MAN-NATURE VALUE ORIENTATION AREA

The three positions possible in the Man-Nature value orientation area are: Subject-to-Nature (S), Harmony-with-Nature (H), and Mastery-over-Nature (M).

Item 2: Length of Life

Teachers in this item chose Mastery-over-Nature preferred to Harmony-with-Nature preferred to Subject-to-Nature ($M > H > S$), with item homogeneity exceeding .001. Parents, in contrast, chose the same pattern, but much less homogeneously ($M \geq H \geq S$), random enough to fail to reach the .05 level of significance. Although the Mastery position was the most popular, Indian parents still showed considerable preference for the Harmony-with-Nature orientation.

Item 6: Facing Conditions

Teachers chose Mastery preferred to Harmony preferred to Subject ($M > H \geq S$), significant overall at the .001 level. Some indecision in choosing between Harmony and Subject orientations was noted, however, following the marked preference for Mastery as the dominant position. Parents, in considerable contrast, proved to prefer the $H > S \geq M$ ordering, significant in overall item patterning at the .05 level of confidence. Here, the ambivalence lay between Subject and Mastery orientations, following a clear-cut first preference for Harmony. The two patterns represent a two-distance difference in type.

Item 9: Belief in Control

Teachers chose Mastery over Harmony over Subject ($M > H > S$) pattern, homogeneous at the .001 level of statistical significance. Parents were equally divided in their first two preferences in the pattern $H = S > M$, although their total patterning, rejecting the Mastery orientation, was homogeneous enough to reach the .01 level of confidence. The orderings represent a one-distance difference in pattern type between the samples.

Item 12: Use of Traplines (Use of the Environment)

The teachers remained consistent in their rank-ordering by choosing for this item the $M > H > S$ order found in the previous three items of this area. Level of statistical significance for the item patterning lay beyond .001. Parents revealed the same rank-ordering as than of the teachers, but with somewhat less homogeneity in the pattern

$M \geq H > S$, significant at the .01 level of confidence for pattern homogeneity. The parental uncertainty between Mastery and Harmony is again revealed, as it was in Item 2. A χ^2 value of 6.38 was found to exist between the similarly-ordered patterns of the two groups. This χ^2 is significant at the .05 level for two degrees of freedom.

Item 22: Hunting, Fishing, and Trapping

Teachers and parents revealed similar patterns in this item, both in type and in internal homogeneity of response. The emergent pattern was found to be Mastery over Harmony over Subject ($M > H \geq S$). Overall homogeneity of item patterning lay at the .001 level for teachers and at the .01 level for parents, with some uncertainty in both groups as to the preference between Harmony and Subject as second-order choices.

Total Pattern: Man-Nature Value Orientation Area

Combining the frequencies of all five items across the Man-Nature area produced a composite rank-ordering for teachers of Mastery preferred to Harmony preferred to Subject ($M > H > S$), and for parents, $M \geq H > S$. The homogeneous nature of the teachers' pattern is noted, as well as the lack of internal homogeneity in the parents' choice between Harmony-with-Nature and Mastery-over-Nature. The similar rank-ordering indicates zero distance between the two groups in pattern type.

In terms of homogeneity of pattern responses in individual items, it was found that all five items in the teachers' group reached a level of statistical significance exceeding .001, while in the parents' group

one item failed to reach the .05 level, two reached the .05 level, and two reached the .01 level. The linked first-order preference of the parents in Item 9 was noted.

One significant χ^2 value was found between similarly-ordered items.

Discussion. The preference of the parents, even though not homogeneous, for the Mastery-over-Nature position in the Length of Life item is congruent with their co-operation in recent years with immunization clinics for both children and adults.

The relative popularity of the Harmony-with-Nature orientation was a feature of the parents' responses, especially in the highly general item Facing Conditions. This apparently indicates that the Indian adult has not moved too far away from the traditional Indian value in this area. The linked first-order preference in the Belief in Control item may be another demonstration of cultural transition as postulated by Kluckhohn. Possibly the uniform second-order preference of the teachers for Harmony-with-Nature represented a choice by exclusion rather than an expression of internalized values. Some teachers, in their evaluation of the instrument itself, asked for an explanation of the term "Harmony-with-Nature." One asked if it meant reliance upon horoscopes. Such queries lead to speculation as to whether the true choices of the teachers lay between the alternatives Mastery-over-Nature and Subject-to-Nature, rather than a genuine rank-ordering of three alternatives of understood value orientations.

In the Hunting, Fishing, and Trapping item, three female respondents replied that they knew nothing about these occupations, which were for men, thus giving a further demonstration of the reluctance of the Indian to assume an inappropriate role even in expressing a preference. The protests might also be interpreted to reveal a change in life patterns, as Indian women in the past traditionally went on the trapline to assist their husbands with the fleshing of the pelts and other camp necessities such as cooking.

The lack of homogeneity in the teacher sample between the Subject-to-Nature and the Harmony-with-Nature orientations in the Hunting, Fishing, and Trapping item could possibly be interpreted to mean that participation in these activities in a leisure-time setting has drawn non-Indian persons closer to Indian values than in any other behavior sphere in this value orientation area.

In sum, the parallel rank-orderings in the Man-Nature area for both teachers and parents could indicate the usefulness of continuing to discuss with the Indian people the various problems in their present situation. A common base for communication has apparently been established through the dominant preference for the Mastery-over-Nature value orientation.

IV. ACTIVITY VALUE ORIENTATION AREA

In the Activity value orientation area, the three possible positions are: Being (B), Being-in-Becoming (Bc), and Doing (D).

Item 4: Job Choice

The teachers' pattern for this item proved to be Doing preferred

over Being-in-Becoming preferred over Being ($D > Bc > B$), statistically significant in overall patterning beyond the .001 level. The parents were much more indecisive in their preference, in the ordering Being-in-Becoming over Being over Doing ($Bc \geq B \geq D$), a pattern barely above that expected by chance answering. The patterns of the two groups represent a two-distance difference in type, and the degree of difference in homogeneity of patterning was marked.

Item 8: Ways of Living

Teachers chose the rank-ordering Being-in-Becoming preferred over Doing preferred over Being ($Bc > D > B$), with a homogeneity of response exceeding the .001 level of confidence. Parents once again were quite undecided, in a pattern Being-in-Becoming preferred to Doing preferred to Being ($Bc \geq D \geq B$), with a homogeneity which did not reach the .05 level of significance. Although the two patterns are of a similar type, the difference in degree of homogeneity of response patterns was again marked.

Item 13: Housework

Teachers were found to prefer the pattern Doing preferred over Being-in-Becoming preferred over Being ($D > Bc \geq B$), with a degree of homogeneity exceeding the .001 level. Parents chose the same ordering, but with differing internal emphases in the pattern $D \geq Bc > B$, homogeneous at the .01 level of confidence. The indecisiveness of the teachers between Being-in-Becoming and Being was noted, together with the indecisiveness of the parents in the choice between Doing and Being-in-

Becoming.

Item 16: Non-Working Time

The pattern of teachers in this item was found to be Being-in-Becoming over Doing over Being ($B_c > D > B$), significant overall at the .001 level, while the parents chose a similar pattern, slightly different internally, of $B_c \geq D > B$, also homogeneous at the .001 level of confidence. Some parental ambivalence between Being-in-Becoming and Doing as the first-order choice was noted.

Item 20: Women in the Modern World

Teachers, in a quite homogeneous response, chose the order $B_c > B \geq D$, significant overall at several times the value needed for .001 significance. Parents displayed a quite different ordering, placing Doing over Being-in-Becoming over Being ($D \geq B_c > B$), also homogeneous to the level of .001 in statistical significance. Teachers were somewhat uncertain in their second-choice between Being and Doing, parents in their first-order choice between Doing and Being-in-Becoming. The orderings revealed a two-distance difference in pattern type between the groups.

Total Patterning: Activity Value Orientation Area

Combining the responses across the five items of the Activity value orientation area produced a composite pattern for teachers of Being-in-Becoming preferred over Doing preferred over Being ($B_c > D > B$), and for parents, the same pattern, slightly different in internal homogeneity ($B_c \geq D > B$). There is therefore zero distance between the two

groups in pattern type.

In terms of homogeneity of response patterns by items, some considerable differences were noted. All five teacher items were homogeneous at the .001 level or better, Item 20 considerably so. Two of the parents' items failed to reach the .05 level of statistical significance of homogeneity, one reached the .01 level, and two reached the .001 level.

No significant χ^2 values were found between similarly-ordered items.

Discussion. The value of the Indian parents for an indulgent employer has been commented upon previously, and is in sharp contrast to the preference of the teachers for a "doing" employer. This difference carries considerable implication for program development in the guidance and vocational education fields of education.

The strength of the Being-in-Becoming orientation in both teachers and parents is probably the most important finding in the Activity area. It would appear that appeals to the Indian people for self-improvement, and the desire of the teachers for the same type of activity could be used to develop continuing education projects under school auspices, or using school personnel. Further support for this contention could be adduced from the popularity of the Being-in-Becoming orientation among the teachers in the item concerning Non-Working Time.

The considerable homogeneity of preference among the teachers for the Being-in-Becoming orientation in the item concerning Women in the

Modern World is congruent with the position taken by Friedan concerning a desirable orientation for women in general, but especially in a modern industrialized society.¹²

V. TESTING HYPOTHESIS FIVE

Hypothesis Five predicted significant differences in value orientation patterns between Indian parents and teachers and administrators. Reference to Table XXIV, a summary of the type and degree of homogeneity of response patterns in both parent and teacher samples reveals the following differences:

A. Type Differences in Value Orientations

Relational area (first-order choices) 1 (2D)

B. Differences in Homogeneity of Responses

1. Homogeneity of item patterning (S/m)

Net difference between groups in items failing to reach the .05 level of statistical significance . . . 8

2. Homogeneity of area patterning (binomial analysis)

Net difference in pairs of alternatives at or above the .05 level of statistical significance . . . 5

Applying the decision rule given in Chapter IV,¹³ the null hypothesis of no difference between teacher and parent samples must be rejected. Both Criterion A and Criterion B reveal sufficient differences to conclude that the value orientation patterns of Indian parents differ significantly

¹²Elizabeth Friedan, *The Feminine Mystique* (New York: Dell Publishing Company, 1963).

¹³*Supra*, p. 112.

TABLE XXIV

DIFFERENCES IN VALUE ORIENTATIONS OF PARENTS AND TEACHERS
BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Type Differences		Homogeneity of Response Pattern Differences		
		Number of Items Below .05 Level Stat. Sig. (S/m)	Number of Area Pairs of Alternatives Above .001 Level Stat. Sig. (Binomial)	
Value Orientation Area	Distance Differences Between Groups	Parents Tchrs. Net Diff. (Par.-Tchrs.)	Parents Tchrs. Net Diff. (Par.-Tchrs.)	
Relational	2-D	3 0 3	0 0 0	
Time	Nil	2 0 2	2 3 -1	
Man-Nature	Nil	1 0 1	0 3 -3	
Activity	Nil	2 0 2	2 3 -1	
Total	One 2-D	8 0 8	4 9 -5	

from those of teachers and administrators in Northland School Division #61 in 1965/66.

Hypothesis Five was therefore strongly supported.

VI. TESTING SUB-HYPOTHESIS 5.1

Sub-hypothesis 5.1 predicted that the greater the number of years of teacher education possessed by the teachers or administrator, the greater the dissimilarity of his value orientation pattern to that of Indian parents.

In order to test this sub-hypothesis, the total teacher and administrator sample was grouped by years of teacher education, then compared, group by group, with the parent sample for differences in value orientation patterns, under Criterion A (type of pattern) and Criterion B (homogeneity of response patterns). The results of the comparisons are shown in Table XXV. It was reasoned that the null hypothesis of no difference among the groups must be rejected if step-wise differences between groups under Criterion A and Criterion B were found as the years of teacher education possessed by the teachers and administrators increased.

Inspection of the data reveals that under Criterion A (Type Differences) between-group step-wise differences were found. One two-distance type difference appeared between parents and all teacher sub-samples. Under criterion B, the net difference in item homogeneity rose from three for teachers with one year teacher education to six for teachers with four, five, and six years' teacher education. The net

TABLE XXV
DIFFERENCES IN VALUE ORIENTATION PATTERNS OF PARENTS
AND TEACHERS ACCORDING TO YEARS OF TEACHER EDUCATION
BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE

Group	Homogeneity of Response Differences		Type Differences		
	Items Below .05 (S/m)	Area Altern. Pairs Above .001	Distance		
			1D	2D	3D
Parents	8	4			
Teachers	5	6		1	
1 yr. T. Ed.					
Net Difference	3	-2			
Parents	8	4			
Teachers	4	7		1	
2 yrs.T. Ed.					
Net Difference	4	-3			
Parents	8	4			
Teachers	5	8		1	
3 yrs.T. Ed.					
Net Difference	3	-4			
Parents	8	4			
Teachers	2	7		1	
4,5,6 yrs. T. Ed.					
Net Difference	6	-3			

difference in homogeneity of area alternative pair choices rose from -2 to -4 for teachers with three years' teacher education, then dropped back to -3 for teachers with four, five, and six years' teacher education. Overall, however, the change was from -2 to -3. Under Criterion B, therefore, the null hypothesis of no difference between groups according to years of teacher education possessed by teachers and administrators must be rejected. The greater the number of years of teacher education possessed by the teacher or administrator, the greater the dissimilarity of his pattern of value orientation to those of Indian parents.

Sub-hypothesis 5.1 was therefore partially supported.

VII. SUMMARY

This chapter has presented the findings concerning the variations in value orientation patterns of parents and teachers and the testing of Hypothesis 5 and sub-hypothesis 5.1.

In the Relational value orientation area, differences in type and homogeneity of response patterns were found. Parents chose Lineality over Collaterality over Individualism, whereas teachers chose Individualism over Lineality over Collaterality. Type differences were found in the items Help in Misfortune, Wage Work, and Family Work Relations. The much higher homogeneity of response patterns among the teachers than among the parents was noted. The existence of the two-distance difference in total area patterns was noted as an important finding, in terms of the Kluckhohn theory.

In the Time area, both groups chose Future over Present over Past, although parents were somewhat ambivalent between Future and Present as the dominant position. Very large differences in homogeneity of preferences were found in this area between the two groups. Type differences were found in the items Ideas About Change, Ideas About Life, Changes in Church Services, and Sudden Community Wealth.

In the Man-Nature area, both groups chose Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature, although parents were somewhat ambivalent in their choice between Harmony-with-Nature and Subject-to-Nature as their second-order variant. The decisive rejection of the Past orientation by both groups was noteworthy. Type differences were found in the items Facing Conditions and Belief in Control. A consistent difference in homogeneity of responses was noted between the samples--all items showed great homogeneity among the teachers, much less among the parents.

In the Activity area, both groups chose Being-in-Becoming over Doing over Being. Type differences were found in the items Job Choice and Women in the Modern World.

In testing Hypothesis 5, sufficient evidence was produced under both Criterion A and Criterion B to conclude that significant differences exist between the value orientation patterns of Indian parents and those of teachers and administrators in Northland School Division #61.

Under Sub-hypothesis 5.1, it was concluded that, to a limited extent, the greater the years of teacher education possessed by the teacher and administrator, the greater the dissimilarity of his pattern of value orientations to that of Indian parents.

CHAPTER VIII

VARIATIONS IN VALUE ORIENTATION PATTERNS OF PUPILS AND TEACHERS

Hypothesis 6 predicted significant differences between the value orientation patterns of adolescent Indian pupils and those of teachers and administrators. Table XXVI presents the item-by-item findings for each group, showing rank-ordering of preferences, distance between rank-orderings of the two groups, homogeneity of overall item responses (Kendall's "S" divided by the number of respondents, "n"), frequency of within-area preferences reaching the .001 level of statistical significance (binomial analysis), and χ^2 values for differences in homogeneity of patterning between similarly-ordered items. Following the presentations of the findings in each section, the decision will be given concerning the acceptance or rejection of Hypothesis 6, and of sub-hypotheses 6.1, 6.2, 6.3, and 6.4.

In view of the detailed presentation already made in Chapters VI and VII concerning the patterns of teachers and pupils, in a different context, this chapter will present and discuss only those findings where differences in pattern type or large differences in homogeneity of responses were found between pupil and teacher samples.

I. RELATIONAL VALUE ORIENTATION AREA

The three possible positions in the Relational value orientation area are: Lineality (L), Collaterality (C), and Individualism (I).

Item 1: Choice of Delegate

Pupils and teachers differed considerably in the degree of homogeneity

TABLE XXVI

RANK-ORDERING, HOMOGENEITY OF RESPONSE PATTERNS, AND ORDERING DISTANCE OF PUPILS AND TEACHERS

Value Orientation Area	Item	Pupils (N=138)		Teachers (N=129)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance 1 2 3	χ^2 df = 2	
I. Relational	1	C \geq I \geq L	3.01	C \geq I > L	38.34 ³	- - -	ns	
	7	L > I \geq C	37.87 ³	I \geq L > C	17.04 ³	x - -	N/A	
	11	C > I > L	42.30 ³	C > I \geq L	21.28 ³	- - -	ns	
	14	L > C > I	93.37 ³	I \geq L \geq C*	11.83 ²	- x -	N/A	
	15	C \geq L > I	25.32 ³	I \geq C > L	23.48 ³	- x -	N/A	
	18	I \geq L > C	66.94 ³	I > L > C	98.42 ³	- - -	ns	
Relational Area Pattern	21	L > C \geq I	36.57 ³	L > C > I	138.21 ³	- - -	ns	
		L > C > I		I > L > C		2D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 3		Within-Area Preferences Reaching .001 level . . . 0				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0Dzero distance

1Done-distance difference

2Dtwo-distance difference

3Dthree-distance difference

TABLE XXVI (continued)

		Pupils (N=138)		Teachers (N=129)		Inter-Group Differences		
Value Orientation Area	Item	Homogeneity of Response (S/m)		Homogeneity of Response (S/m)		Distance		χ^2 df = 2
II. Time	3	F > P > Pa	77.71 ³	P > F > Pa	185.88 ³	x	- -	N/A
	5	F ≥ P ≥ Pa	0.83	F > P > Pa	113.63 ³	-	- -	ns
	10	F ≥ P > Pa	59.20 ³	P > F > Pa	147.45 ³	x	- -	N/A
	17	P ≥ F > Pa	33.89 ³	P ≥ F > Pa	53.89 ³	-	- -	ns
	19	F > P > Pa	136.36 ³	F > P > Pa	215.98 ³	-	- -	ns
	24	F ≥ Pa > P	24.10 ³	F > Pa ≥ P	128.48 ³	-	- -	ns
Time Area Pattern		F > P > Pa		F > P > Pa		0D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 3		Within-Area Preferences Reaching .001 level . . . 3				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXVI (continued)

Value Orientation Area	Item	Pupils (N=138)		Teachers (N=129)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance 1 2 3	χ^2 df = 2	
III. Man-Nature	2	S > M > H	50.45 ³	M > H > S	86.73 ³	- x -	N/A	
	6	S > H ≥ M	9.91 ²	M > H ≥ S	34.56 ³	- - x	N/A	
	9	H > S > M	34.51 ³	M > H > S	29.10 ³	x - -	N/A	
	12	M > H > S	18.45 ³	M > H > S	98.42 ³	- - -	ns	
	22	M ≥ S > H	12.18 ²	M > H ≥ S	37.49 ³	x - -	N/A	
Man-Nature Area Pattern		S > M ≥ H		M > H > S		2D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 0		Within-Area Preferences Reaching .001 level . . . 3				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXVI (continued)

Value Orientation Area	Item	Pupils (N=138)		Teachers (N=129)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance	χ^2	df = 2
IV. Activity	4	Bc > B ≥ D	21.62 ³	D > Bc > B	53.05 ³	- x -	N/A	
	8	Bc > D ≥ B	48.03 ³	Bc > D > B	70.13 ³	- - -	ns	
	13	D > Bc > B	158.69 ³	D > Bc ≥ B	22.14 ³	- - -	ns	
	16	Bc > D > B	99.14 ³	Bc > D > B	65.14 ³	- - -	18.88 ³	
	20	D ≥ Bc > B	95.03 ³	Bc > B ≥ D	122.52 ³	- x -	N/A	
Activity Area Pattern		Bc ≥ D > B		Bc > D > B		0D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 1		Within-Area Preferences Reaching .001 level . . . 3				

ns not significant

¹ significant at the .05 level

² significant at the .01 level

³ significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

with which they ordered their preferences in this item. Pupils failed to reach agreement at the .05 level of confidence in their overall item patterning of Collaterality over Individualism over Lineality ($C \geq I \geq L$). Teachers' preferences were sufficiently homogeneous to exceed the .001 level of statistical significance in their pattern $C \geq I > L$.

Item 7: Help in Misfortune

Pupils and teachers differed in type of pattern in this item, but not greatly in degree of homogeneity of preference. The pupils' pattern was found to be Lineality over Individualism over Collaterality ($L > I \geq C$), statistically significant overall at the .001 level. Teachers preferred an Individualism over Lineality over Collaterality ($I \geq L > C$) ordering, still significant in homogeneity of response at greater than the .001 level. The patterns of the two groups produced a one-distance difference in type.

Item 14: Wage Work

Pupils were quite homogeneous in their choice of Lineality over Collaterality over Individualism ($L > C > I$), significant in response homogeneity at a level considerably exceeding .001. Teachers, in contrast, chose the ordering Individualism over Lineality over Collaterality ($I \geq L \geq C^*$), but were relatively less homogeneous in their overall patterning, significant at the .01 level. Two pairs of preferences within the item (Individualism over Lineality, and Lineality over Collaterality) failed to reach the .05 level of statistical significance, but the preference for the third pair, Individualism over Collaterality, was quite

definite. The orderings of the two groups produced a two-distance difference between pupils and teachers in pattern type.

Item 15: Family Work Relations

Teachers chose the Individualism over Collaterality over Lineality pattern ($I \geq C > L$), significant overall at the .001 level of confidence. Pupils chose a contrasting ordering, Collaterality over Lineality over Individualism ($C \geq L > I$) with an almost identical homogeneity response, significant at the .001 level. Among the teachers, some ambivalence was noted in the choice of Individualism over Collaterality, and among the pupils, Collaterality over Lineality. The orderings of the two groups produced a two-distance difference between pupils and teachers in pattern type.

Item 21: Leaving Residential School

Pupils ranked their preferences in this item Lineality over Collaterality over Individualism ($L > C > I$), significant overall at the .001 level, while teachers were much more decisive in their ranking, which was found to be $L > C > I$.

Total Pattern: Relational Value Orientation Area. Combining the frequencies of the responses of pupils and teachers across all seven items in the Relational area produced a composite rank-ordering for the pupils of Lineality over Collaterality over Individualism ($L > C > I$), while for the teachers the pattern was found to be Individualism over Lineality over Collaterality ($I > L > C$). Both patterns were homogeneous in internal choices among pairs of preferences at a level exceeding .05.

The rank-orderings produced a two-distance difference between pupils and teachers in pattern type.

In terms of homogeneity in individual items, pupils failed to reach the .05 level of statistical significance on one item, but reached the .001 level on the remaining six. Teachers' items revealed homogeneity at the .01 level on one item, and at the .001 level on six others.

No significant χ^2 values were found for similarly-ordered items in the two groups.

Discussion. The immaturity of the adolescent might be hypothesized to account for some of differences of both type and homogeneity of preference between pupils and teachers. The indecisiveness of the pupils in choosing a delegate, extending through all three pairs of alternatives within Item 1, contrasts with the firmness of the teachers in rejecting Lineality. The choice of the pupils for Lineality in both the Help in Misfortune and Family Work Relations items could stem from their age. The pupils' choice for Individualism in the Welfare Assistance item might result from the known fact that the parent must of his own initiative seek public assistance. In Wabasca, large numbers of families are supported in this way, and the obtaining of assistance is considered almost a personal skill.

A puzzling finding is the strong contrast between the pupils' ordering of Lineality over Collaterality over Individualism in the Wage

Work item, and the teachers' indecision between Individualism and Lineality, and their relegating Collaterality to third choice. Possibly the concept of teachers in a school working together as a group requires re-examination. It could be suggested that in fact they are individualists gathered in the same building performing similar tasks, but lacking group solidarity. This could have implications for the concept of team teaching.

In sum, the two-distance type difference between the patterns of pupils and teachers indicates the need for the closest study of curriculum goals and instructional methods in all subject areas where the Relational value orientation has meaning.

II. TIME VALUE ORIENTATION AREA

The three possible orientations in the Time area are: Past (Pa), Present (P), and Future (F).

Item 3: Child Training

Pupils chose the Future over Present over Past ($F > P > Pa$) ordering, significant overall at the .001 level of confidence. Teachers were more homogeneous in their pattern, Present over Future over Past ($P > F > Pa$). The choices of the groups represent a one-distance difference between pupils and teachers.

Item 5: Ideas about Change

Pupils as a group were very confused in their responses to this item, which lay slightly above the level of chance answering, in the pattern Future preferred over Present preferred over Past ($F \geq P \geq Pa$). Teachers, in contrast, displayed considerable homogeneity in the same

ordering ($F > P > Pa$), with statistical significance exceeding the .001 level by a wide margin.

Item 10: Ideas About Life (Philosophy of Life)

Pupils were again somewhat uncertain in one pair of preferences in this item, but were found to have a pattern overall of Future over Present over Past ($F \geq P > Pa$), statistically significant at the .001 level. The indecision lay between the choice of Future or Present as the dominant orientation. Teachers, by contrast, showed firm homogeneity of preference for Present preferred over Future preferred over Past ($P > F > Pa$). The respective patterns produced a one-distance difference in type between pupils and teachers.

Item 24: Sudden Community Wealth

Although teachers and pupils chose the same rank-ordering in this item, some considerable difference in homogeneity of preference was observed. The pupil pattern became Future over Past over Present ($F \geq Pa > P$), the teacher pattern, $F > Pa \geq P$. Both patterns were homogeneous beyond the .001 level, but the S/m quantities were substantially different.

Total Pattern: Time Value Orientation Area

Combining the frequencies of responses across the six items in the Time area produced the same pattern for both pupils and teachers--Future preferred over Present preferred over Past ($F > P > Pa$), with internal preferences in each pattern exceeding the .05 level.

In terms of individual items, two displayed one-distance differences between pupils and teachers. Concerning overall homogeneity of response patterning, one pupil item failed to reach the .05 level of significance, while the remaining five exceeded the quantity required for .001. Among the teacher sample, all six items exceeded in homogeneity of response patterns the quantities required for .001.

No significant χ^2 values were found in similarly-ordered items.

Discussion. Probably the most significant finding in the Time value orientation area was the strong rejection of the Past orientation by both pupils and teachers. Pupils, although not always too decisive in their rankings, actually placed Future in the dominant position in five out of six items, while teachers gave Future first place in only three items. The remaining three items revealed a dominant Present orientation. It could be hypothesized that this reveals in the students a greater level of motivation to improve their lot than is present among the teachers.

The limitations of Item 5 in terms of "asking the wrong question" has already been discussed,¹³ with the implication that differences in homogeneity in this item should be treated with caution.

Parents may be dissatisfied with the pupils' choice of a Present orientation in the Changes in Church Services item, for which the parents chose Past as their dominant preference. In the item Going Away to School, the strong congruence between pupils and teachers indicates that efforts

¹³*Supra*, p. 135.

to enlarge the occupational horizons of pupils should be continued and intensified, even at the risk of producing conflicts with other value orientations such as the Relational.

To summarize, the general congruence between pupils and teachers in the Time value orientation area was noted, a situation which could be interpreted to mean that programs of education based upon a Future orientation are realistic in isolated Indian settlements in northern Alberta.

III. MAN-NATURE VALUE ORIENTATION AREA

The three possible orientations in the Man-Nature area are: Subject-to-Nature (S), Harmony-with-Nature (H), and Mastery-over-Nature (M).

Item 2: Length of Life

Pupils chose a Subject-to-Nature preferred to Mastery-over-Nature preferred to Harmony-with-Nature orientation ($S > M > H$) pattern in this item, with overall significance exceeding the .001 level of confidence. Teachers were found to have a different pattern--Mastery-over-Nature preferred to Harmony-with-Nature preferred to Subject-to-Nature ($M > H > S$), also significant beyond the .001 level. The findings created a two-distance difference between groups in pattern type.

Item 6: Facing Conditions

The most distinctive difference in the entire study appeared in this item. Pupils chose a Subject-to-Nature preferred to Harmony-with-Nature

preferred to Mastery-over-Nature pattern ($S > H > M$), statistically significant in homogeneity of patterning at .01 level. Teachers, in contrast, rank-ordered their preferences Mastery-over-Nature preferred to Harmony-with-Nature preferred to Subject-to-Nature ($M > H \geq S$), homogeneous in response pattern beyond the .001 level of confidence. The two patterns created a three-distance difference in type. Pupils as a group were somewhat uncertain about the Harmony-versus Mastery alternative for second choice, but chose Harmony slightly more often. Teachers were indecisive to some extent in choosing between Harmony and Subject as their second preference, but named Harmony somewhat more frequently.

Item 9: Belief in Control

The pupils' pattern was found to be Harmony-with-Nature preferred to Subject-to-Nature preferred to Mastery-over-Nature ($H > S > M$), homogeneous beyond the .001 level. Teachers chose a different pattern of Mastery-over-Nature preferred to Harmony-with-Nature preferred to Subject-to-Nature ($M > H > S$), also statistically significant beyond the .001 level. The rank-orderings of the groups produced a one-distance difference in pattern type.

Item 22: Hunting, Fishing, and Trapping

Pupils chose a Mastery-over-Nature preferred to Subject-to-Nature preferred to Harmony-with-Nature ($M \geq S > H$) ordering, statistically significant overall at the .01 level. Teachers chose a different pattern, preferring Mastery-over-Nature to Harmony-with-Nature to Subject-to-Nature

($M > H \geq S$), with homogeneity of response patterns exceeding the .001 level. Pupils were ambivalent between the Mastery and Subject orientations for their dominant orientation, and teachers were somewhat indecisive between Harmony and Subject positions for their second-order preference. The two patterns produced a one-distance difference between the two groups.

Total Pattern: Man-Nature Value Orientation Area. Combining the frequencies of responses to the five items in this area produced a pattern of Subject-to-Nature preferred to Mastery-over-Nature preferred to Harmony-with-Nature ($S > M \geq H$) for the pupils, and Mastery-over-Nature preferred to Harmony-with-Nature preferred to Subject-to-Nature ($M > H > S$) for the teachers. These patterns created a two-distance difference between pupils and teachers in the total Man-Nature area.

In terms of homogeneity of overall item patterning, two pupils' items failed to reach the .001 level of statistical significance, but the remaining three did so. In the parents' sample, all five items exceeded the .001 level of significance in homogeneity of patterning.

No significant χ^2 value for the one similarly-ordered item was found.

Discussion. The existence of the largest type difference between groups in the entire study, together with the finding that four out of five items possessed type differences in rank-ordering would seem to indicate that

the Man-Nature area requires careful study from the standpoint of program development. Restraint is indicated, however, in making program changes based upon these findings, since the apparent differences may yet prove to be due to age rather than to ethnicity or socio-economic status.

IV. ACTIVITY VALUE ORIENTATION AREA

The three possible orientations in the Activity area are:

Being (B), Being-in-Becoming (Bc), Doing (D).

Item 4: Job Choice

Patterns of teachers and of pupils were quite different in this item. Pupils preferred the Being-in-Becoming over Being over Doing ordering ($Bc > B \geq D$), significant overall at the .001 level of confidence. Teachers preferred Doing over Being-in-Becoming over Being ($D > Bc > B$), also significant at the .001 level in homogeneity of responses. Some ambivalence in the pupils in the second-order choice between Being and Doing was noted. The two patterns created a two-distance difference between teachers and pupils in pattern type.

Item 8: Ways of Living

Pupils chose the Being-in-Becoming over Doing over Being pattern ($Bc > D \geq B$), with homogeneity of overall item response significant at the .001 level. Teachers preferred a Being-in-Becoming over Doing over Being pattern ($Bc > D > B$), but with no ambivalence in internal patterning. The homogeneity of the teachers' pattern lay beyond the .001 level.

Item 13: Housework

Pupils, in a marked display of homogeneity of responses, significant at many times the required value for .001, chose a Doing over Being-in-Becoming over Being pattern ($D > Bc > B$). Teachers chose the same ordering, but were quite undecided about whether to choose Being-in-Becoming or Being as their second-order choice. The final pattern, $D > Bc \geq B$, was homogeneous in overall response at the .001 level.

Item 20: Women in the Modern World

Pupils chose a Doing over Being-in-Becoming over Being ($D \geq Bc > B$) pattern, significant overall at the .001 level. Some uncertainty within the item was noted between choosing Doing and Being-in-Becoming. Teachers chose Being-in-Becoming over Being over Doing ($Bc > B \geq D$), also at a level of homogeneity well beyond .001. Within the item, however, teachers were somewhat uncertain about the choice between Being and Doing in the third-order position. The different orderings of the two groups produced a two-distance difference in pattern type.

Total Pattern: Activity Value Orientation Area. Combining the frequencies across the five items in the Activity area produced a pupils' pattern of Being-in-Becoming over Doing over Being ($Bc \geq D > B$). The teachers' pattern was found to be Being-in-Becoming over Doing over Being ($Bc > D > B$). In the total value orientation area, then, zero distance was found between the patterns of pupils and teachers. In

individual items, two two-distance differences were found. All five groups displayed homogeneity of overall item patterning beyond the .001 level in all items.

A χ^2 value of 18.88 was discovered between the groups in Item 16, Non-Working Time, significant beyond the .001 level for $df=2$.

Discussion. The general profiles of teachers and pupils in the Activity value orientation area were found to be quite similar, especially in placing the Being orientation in third-order position. In eight out of the ten items in the two groups, Being ranked third, and in the remaining two items, second. It could be argued from this finding that the motivation of pupils of Indian ancestry is not as low as some teachers have stated, and that the reason for low pupil-achievement may lie in conflicts with other value orientation areas. An explanation might be that although Indian pupils have a basic Doing orientation, they direct their energies in other channels than those of formal education.

V. TESTING HYPOTHESIS SIX

Hypothesis Six predicted significant differences between the value orientation patterns of adolescent Indian pupils and those of teachers and administrators in Northland School Division #61 in 1965/66. Reference to Table XXVII, a summary of the type and degree of differences in homogeneity of response patterns of pupils and teachers, reveals the following differences:

A. Type Differences in Value Orientations

Relational Area (First-order choices)	1 (2D)
---------------------------------------	--------

TABLE XXVII
DIFFERENCES IN THE VALUE ORIENTATIONS OF PUPILS AND TEACHERS
BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Type Differences		Homogeneity of Response Differences					
		Number of Items Below .05 Level of Significance (S/m)			Number of Area Pairs of Alternatives Above .001 Level of Significance (Binomial)		
Area	Distance Differences Between Groups	Pupils	Tchrs	Net Difference Pupils-Teachers	Pupils	Tchrs	Net Difference Pupils-Teachers
Relational	2-D	1	0	1	3	0	3
Time	Nil	1	0	1	3	3	0
Man-Nature	2-D	0	0	0	0	3	-3
Activity	Nil	0	0	0	1	3	-2
Total	Two (2-D)	2	0	2	7	9	-2

Man-Nature Area (First-order choices) 1 (2-D)

B. Differences in Homogeneity of Responses

1. Homogeneity of item patterning (S/m)

Net difference between groups in items failing to reach the .05 level of statistical significance . . 2

2. Homogeneity of area patterning (binomial analysis)

Net difference between groups in pairs of alternatives at or above .001 level of statistical significance 2

Applying the decision rule given in Chapter IV,¹⁶ the null hypothesis of no difference between teacher and pupil samples must be rejected. Criterion A reveals sufficient difference in pattern types to conclude that the value orientation patterns of adolescent Indian pupils differ significantly from those of teachers and administrators in Northland School Division #61 in 1965/66.

Hypothesis Six was therefore strongly supported.

VI. TESTING SUB-HYPOTHESIS 6.1

Sub-hypothesis 6.1 predicted that the older the adolescent Indian pupil, the greater the similarity of his value orientation pattern to that of teachers and administrators.

In order to test this sub-hypothesis, the pupil sample was grouped by age, then compared with the teacher and administrator sample under Criterion A (type differences) and Criterion B (homogeneity of response

¹⁶*Supra*, p. 112.

differences). The results of the comparisons are shown in Table XXVIII. It was reasoned that the null hypothesis must be rejected if progressive differences were found under Criterion A and Criterion B as the age of pupils increased.

Inspection of the data reveals that there is some decrease in the type differences under Criterion A as age of pupils increases, with the exception of the fourteen-year-old group. Homogeneity of response pattern differences in items drop between the twelve-year-old group and the fifteen-year-old group, but rise again with the group aged sixteen to eighteen years. In spite of these variations in the regular progression of differences, it is noted that overall there was a decrease in homogeneity of item response differences of four (from -14 to -10), and in terms of value orientation areas, a decrease of five (from 7 to 2) when comparing the twelve-year-old sample with the oldest sample.

Thus, although the progression of differences from youngest to oldest pupil groups was not entirely uniform, it was found to be sufficiently consistent to reject the null hypothesis of no difference between teachers and pupils according to the age of pupils. Under Criterion A and Criterion B it was found that, in general, the older the adolescent Indian pupil, the greater the similarity of his value orientation pattern to that of teachers and administrators.

Sub-hypothesis 6.1 was therefore very tentatively supported.

TABLE XXVIII

DIFFERENCES IN VALUE ORIENTATION PATTERNS OF TEACHERS
AND PUPILS GROUPED BY AGE, AND BY TYPE AND DEGREE OF
HOMOGENEITY OF RESPONSE PATTERNS

Group	Homogeneity of Response Differences		Type Differences		
	Items Below .05 (S/m)	Area Altern. Pairs Above .001	Distance		
			1D	2D	3D
Teachers (N=129) Pupils aged 12 (N=25)	0 14	9 2	1	2	0
Net Difference	-14	7			
Teachers Pupils aged 13 (N=37)	0 7	9 5	0	2	0
Net Difference	-7	4			
Teachers Pupils aged 14 (N=30)	0 6	9 5	1	1	0
Net Difference	-6	4			
Teachers Pupils aged 15 (N=31)	0 4	9 5	0	2	0
Net Difference	-4	4			
Teachers Pupils aged 16, 17,19 (N=15)	0 10	9 7	0	2	0
Net Difference	-10	2			

Discussion

Interesting differences in area patterns occur when pupils' responses are grouped by age. Table XXIX presents a summary of the area patterns of all pupils, and pupils in various age groups. The departure of the fourteen-year-old group from some of the patterns of those younger and older is noteworthy. In the Relational area, the fourteen-year-olds put Individualism in second place; in the Man-Nature area, Mastery is equally preferred to Subject-to-Nature. It could be hypothesized that at the age of fourteen the Indian adolescent takes tentative steps towards the value orientations of the dominant white culture, but retreats to typical Indian value orientations at the age of fifteen and later. To generalize, at the age of fourteen, the Indian child may be making his life decision to become a white man or stay an Indian. Apparently, among the pupil sample, the decision is, in the main, to remain an Indian.

TABLE XXIX

VALUE ORIENTATION PATTERNS OF ALL PUPILS AND
OF PUPILS GROUPED BY CHRONOLOGICAL AGE

Area	All pupils N=138	Pupils 12 N=25	Pupils 13 N=37	Pupils 14 N=30	Pupils 15 N=31	Pupils 16,17,18 N=15
Re.	L > C > I	L > C > I	L > C > I	L > I > C	L > C > I	L > C > I
Time	F > P > Pa	F > P > Pa	F > P > Pa	F > P > Pa	F > P > Pa	F > P > Pa
Man-Nat.	S > M > H	S > M > H	S > M > H	S = M > H	S > M > H	S > M > H
Activity	Bc > D > B	D > Bc > B	Bc > D > B	Bc > D > B	Bc > D > B	Bc > D > B

Kluckhohn makes no mention of the minimum age for which her theory and method may be valid. Inspection of the findings for the twelve-year-old group (those pupils whose age lay between twelve and thirteen) indicates that a rather low level of homogeneity of overall item response patterns exists. This raises the question of the validity of the theory and method for this group. It could be suggested that biological or sociocultural maturation (or both) may be factors in this low level of homogeneity of response. Whatever the cause, a logical conclusion could be that the Kluckhohn theory and method may be valid only for those of the full age of thirteen and upwards.

VII. TESTING SUB-HYPOTHESIS 6.2

Sub-hypothesis 6.2 predicted that the greater the number of years spent by the adolescent Indian pupil in residential school during his lifetime, the greater the similarity of his value orientation pattern to that of teachers and administrators. In order to test this sub-hypothesis, the pupil sample was grouped by number of years of residential school experience, then compared with the teachers' and administrators' sample under both Criterion A (type differences) and Criterion B (homogeneity of response differences). The results of the comparison are shown in Table XXX. It was reasoned that the null hypothesis of no difference between groups must be rejected if progressive differences were found according to the years of residential school experience of pupils.

Inspection of the data reveals that under Criterion A, a decrease in differences in type of pattern occurred as predicted. Pupils with no

residential school experience diverged from teachers by one one-distance and two two-distance differences, whereas pupils with seven, eight, and nine years' residential school experience diverged by only two two-distance differences. Under Criterion B, net differences in items below the .05 level of significance dropped from -5 to -3, although the regression was not linear. Similarly, considering area alternative pair choices, the differences in pairs significant at the .001 level decreased from five to four, again not in linear fashion.

Thus, although decreases in differences according to years of residential school were found between the extremes of the sample, the null hypothesis of no differences between groups can only be tentatively rejected. The curvilinear nature of the overall regression gives rise to queries concerning the nature of the sample and the possible presence of contaminating variables.

Sub-hypothesis 6.2 was therefore only tentatively supported.

Discussion. The lack of uniformity of regression in the findings used in testing sub-hypothesis 6.2 may be due in part to the factors of age, Treaty status, and the nature of the data collected. The indecisiveness of the findings in the twelve-year-old sample has already been discussed, and it should be noted that this age-group tends to cluster in the first two categories of residential school experience. Further, residential school admission policies almost completely exclude Indian pupils other than those of Treaty status. The category of zero years residential school experience is biased due to the presence of an unusually large

TABLE XXX

DIFFERENCES IN VALUE ORIENTATION PATTERNS OF TEACHERS
AND PUPILS BY YEARS OF RESIDENTIAL SCHOOL EXPERIENCE,
AND BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Group	Homogeneity of Response Differences		Type Differences		
	Items Below .05 (S/m)	Area Altern. Pairs Above .001	Distance		
			1D	2D	3D
Teachers Pupils 0 R.S.E. (N=61)	0 5	9 4	1	2	-
Net Difference	-5	5			
Teachers Pupils 1,2,3 Yrs. R.S.E. (N=21)	0 11	9 4	-	1	-
Net Difference	-11	5			
Teachers Pupils 4,5,6 Yrs. R.S.E. (N=28)	0 9	9 6	-	2	-
Net Difference	-9	3			
Teachers Pupils 7,8,9 Yrs. R.S.E. (N=28)	0	9	-	2	-
Net Difference	-3	4			

proportion of non-Treaty individuals. Because of these limitations, the findings from sub-hypothesis 6.2 must be treated with considerable caution.

VIII. TESTING SUB-HYPOTHESIS 6.3

Sub-hypothesis 6.3 predicted that the value orientation pattern of female adolescent Indian pupils would reveal greater differences from that of teachers and administrators than would the pattern of male adolescent Indian pupils.

In order to test the sub-hypothesis, the male pupil sample and the female pupil sample were compared with the teacher and administrator sample under Criterion A (type differences) and Criterion B (homogeneity of response pattern differences). The results of the comparison are shown in Table XXXI. It was reasoned that if the distance differences under Criterion A and the net differences in homogeneity of responses under Criterion B were larger between the female pupils and teachers than between male pupils and teachers, the null hypothesis must be rejected.

Inspection of the data reveals that under Criterion A, distance differences remained the same when either male or female responses were compared with those of teachers. Under Criterion B, item differences between teachers and male pupils were found to be three, whereas with female pupils the number was five. In area homogeneity of responses, male pupils differed from teachers in three pairs of alternatives, female pupils in four. Since a larger difference was thus found to exist between teachers and female pupils than between teachers and male pupils, the

null hypothesis must be rejected. The value orientation pattern of female adolescent Indian pupils reveals greater differences from that of teachers and administrators than does that of male pupils.

Sub-hypothesis 6.3 was therefore supported.

TABLE XXXI

DIFFERENCES IN VALUE ORIENTATION PATTERNS OF TEACHERS, MALE PUPILS, AND FEMALE PUPILS BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Group	Homogeneity of Response Differences		Type Differences		
	Items Below .05 (S/m)	Area Altern. Pairs Above .001	Distance		
			1D	2D	3D
Teachers	0	9	-	1	-
Male Pupils (N=66)	3	6			
Net Difference	3	3			
Teachers	0	9	-	1	-
Female Pupils (N=72)	5	5			
Net Difference	5	4			

IX. TESTING SUB-HYPOTHESIS 6.4

Sub-hypothesis 6.4 predicted that the greater the number of years of teacher education possessed by the teacher or administrator, the greater the dissimilarity of his pattern of value orientation to that of adolescent Indian pupils.

In order to test this sub-hypothesis, the teacher and administrator

sample was grouped by years of teacher education, then compared with the total pupil sample under Criterion A (type differences) and Criterion B (homogeneity of response differences). The results of the comparison are shown in Table XXXII. It was reasoned that if progressive differences under Criterion A or Criterion B were found between pupils and teachers grouped according to years of teacher education, the null hypothesis of no difference must be rejected.

Inspection of the data reveals that under Criterion A, no differences in pattern type were found as the years of teacher education possessed by the teacher or administrator increased. Under Criterion B, differences in homogeneity of pattern decreased between pupils and teachers as years of teacher education increased, until zero difference was recorded between pupils and teachers with the greatest number of years of teacher education. No linear relationship was found in the differences between pupils and teachers as the years of teacher education increased. The null hypothesis of no difference must therefore be accepted.

Sub-hypothesis 6.4 was therefore not supported.

Discussion. Although sub-hypothesis 6.4 was not supported, some differences in the internal homogeneity of responses by alternative pairs were noted in the sub-groups of teachers. Reference to Table XXXIII, which gives the symbolic notation for the area patterns of pupils, all teachers, and teachers grouped according to years of teacher education, indicates that the homogeneity of responses of teachers with two years' teacher education departed somewhat from the patterns of both those with less and more

TABLE XXXII

DIFFERENCES IN VALUE ORIENTATION PATTERNS OF PUPILS
AND TEACHERS BY YEARS OF TEACHER EDUCATION, BY TYPE
AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Group	Homogeneity of Response Differences		Type Differences		
	Items Below .05 (S/m)	Area Altern. Pairs Above .001	Distance		
			1D	2D	3D
Pupils Teachers 1 yr.T.E. (N=29)	2 5	7 6	-	2	-
Net Difference	-3	1			
Pupils Teachers 2 yrs.T.E. (N=38)	2 4	7 7	-	2	-
Net Difference	-2	0			
Pupils Teachers 3 yrs.T.E. (N=36)	2 5	7 8	-	2	-
Net Difference	-3	-1			
Pupils Teachers 4,5,6, yrs. T.E. (N=26)	2 2	7 7	-	2	-
Net Difference	0	0			

teacher education. This is true in the Relational, Time, and Activity value orientation areas. This finding leads to speculation that the two-year group possesses some characteristics unlike the remainder of the teacher sample. Further research in this area might prove useful.

TABLE XXXIII

VALUE ORIENTATION PATTERNS OF PUPILS, ALL TEACHERS,
AND TEACHERS BY YEARS OF TEACHER EDUCATION

Area	Pupils N=138	All Teachers N=129	Teachers 1 yr. T.E. N=29	Teachers 2 yrs. T.E. N=38	Teachers 3yrs. T.E. N=36	Teachers 4,5,6 yrs. T.E. N=26
Relational	$L > C > I$	$I > L > C$	$I \geq L \geq C$	$I > L \geq C$	$I \geq L \geq C$	$I \geq L \geq C$
Time	$F > P > Pa$	$F > P > Pa$	$F > P > Pa$	$F \geq P > Pa$	$F > P > Pa$	$F > P > Pa$
Man-Nature	$S > M \geq H$	$M > H > S$	$M > H > S$	$M > H > S$	$M > H > S$	$M > H > S$
Activity	$Bc \geq D > B$	$Bc > D > B$	$Bc > D > B$	$Bc > D \geq B$	$Bc > D > B$	$Bc > D > B$

X. SUMMARY

This chapter has presented the findings concerning the value orientation patterns of pupils and teachers, and the testing of Hypothesis 6 and sub-hypotheses 6.1, 6.2, 6.3, and 6.4.

In the Relational value orientation area, a two-distance type difference was found between pupils and teachers. Pupils chose Lineality over Collaterlity over Individualism, whereas teachers chose Individualism over Collaterality over Lineality. In individual items, type differences

were found in the Help in Misfortune, Wage Work, and Family Work Relations items.

In the Time value orientation area, both groups chose Future over Present over Past, with high homogeneity of response patterns. In individual items, type differences were found in the Child Training and Ideas About Life items. An outstanding finding was the random answering of the pupils on the item Ideas About Change.

In the Man-Nature area, a two-distance difference in type of pattern was found between the groups. Pupils chose Subject-to-Nature over Mastery-over-Nature over Harmony-with-Nature. Teachers chose Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature. Teachers were considerably more homogeneous in their preferences than were pupils. In individual items, type differences were found in all except the one entitled Use of Traplines. This value orientation area represents a substantial incongruence between patterns of pupils and teachers.

In the Activity area, pupils and teachers chose Being-in-Becoming over Doing over Being. Teachers were somewhat more homogeneous in their patterning than were pupils. In individual items, type differences were found in the Job Choice and Women in the Modern World items.

Testing Hypothesis 6 produced sufficient evidence under Criterion A to conclude that significant differences exist between the value orientation patterns of pupils and those of teachers and administrators of Northland School Division #61. Under Sub-hypothesis 6.1, it was concluded that the older the adolescent Indian pupil, the greater the

similarity of his pattern of value orientations to that of teachers and administrators. Under Sub-hypothesis 6.2, limited support was produced that the greater the number of years of residential school experience possessed by the Indian pupil, the greater the similarity of his pattern of value orientations to that of teachers and administrators. Under Sub-hypothesis 6.3 it was concluded that the value orientation patterns of female adolescent Indian pupils is more dissimilar to that of teachers and administrators than is the pattern of male adolescent Indian pupils. Under Sub-hypothesis 6.4 it was concluded that the dissimilarity in value orientation patterns of pupils and teachers does not increase as the years of teacher education possessed by teachers and administrators increase.

CHAPTER IX

TREATY AND NON-TREATY PUPILS; UNITED KINGDOM AND

ALL OTHER TEACHERS; MISCELLANEOUS ITEMS

Hypothesis Seven predicted no significant differences between value orientation patterns of adolescent Treaty Indian pupils and those of adolescent Non-Treaty Indian pupils. Hypotheses Eight predicted significant differences in value orientation patterns of teachers recruited in the United Kingdom in 1965 and all other teachers in Northland School Division #61 in the school year 1965/66. This chapter presents the appropriate findings from the four sub-samples involved in the two hypotheses, and tests the hypotheses. In addition, the findings in the miscellaneous items #23, 25, and 26 are presented and discussed.

I. VALUE ORIENTATION PATTERNS OF TREATY AND NON-TREATY PUPILS

Table XXXIV presents the item-by-item findings for Treaty and Non-Treaty pupils, showing rank-ordering of preferences, distance differences between rank-orderings, homogeneity of overall item responses (Kendall's "S" divided by the number of respondents), frequency of within-area preferences for alternative pairs reaching the .001 level of significance (measured by binomial analysis), and χ^2 values for differences in homogeneity of item patterning between similarly-ordered items. In view of the detailed presentation and discussion of the value orientations of all pupils, the analysis in this section deals only with those items where type or large homogeneity of response differences were found between Treaty and Non-Treaty pupils.

TABLE XXXIV (continued)

Value Orientation Area	Item	Treaty Pupils (N=90)		Non-Treaty Pupils (N=48)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance	χ^2	df = 2
II. Time	3	F > P > Pa	56.99 ³	F > P > Pa	21.96 ³	- - -	ns	
	5	P ≥ F ≥ Pa	2.25	Pa > P = F	00.29	- x -	N/A	
	10	F > P > Pa	39.50 ³	F ≥ P > Pa	19.76 ³	- - -	ns	
	17	F > P > Pa	24.54 ³	P ≥ F > Pa	9.61 ³	x - -	ns	
	19	F > P > Pa	92.92 ³	F > P > Pa	43.70 ³	- - -	ns	
	24	Pa = F > P	14.00 ³	F ≥ Pa > P	10.76 ²	x - -	N/A	
Time Area Pattern		F > P > Pa		F > P > Pa		0D		
Homogeneity of Prefer- ences (Binomial Analysis)		Within-Area Prefer- ences Reaching .001 level . . . 3		Within-Area Prefer- ences Reaching .001 level . . . 3				

ns

not significant

¹

significant at the .05 level

²

significant at the .01 level

³

significant at the .001 level

N/A

not applicable

0D

zero distance

1D

one-distance difference

2D

two-distance difference

3D

three-distance difference

TABLE XXXIV (continued)

Value Orientation Area	Item	Treaty Pupils (N=90)		Non-Treaty Pupils (N=48)		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance 1 2 3	χ^2 df = 2	
III. Man-Nature	2	S > M > H	21.19 ³	S > M > H	33.49 ³	- - -	ns	
	6	S > M > H	6.73 ¹	S ≥ H ≥ M	3.20	x - -	N/A	
	9	H > S > M	23.78 ³	H ≥ S ≥ M*	12.04 ²	- - -	ns	
	12	M > H > S	13.47 ²	M ≥ H ≥ S*	5.67	- - -	ns	
	22	M > S > H	7.54 ¹	M > S > H	6.35 ¹	- - -	ns	
Man-Nature Area Pattern		S ≥ M ≥ H		S > M ≥ H		0D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 0		Within-Area Preferences Reaching .001 level . . . 1				

ns not significant

¹ significant at the .05 level

² significant at the .01 level

³ significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXXVI (continued)

Value Orientation Area	Item	Treaty Pupils (N=90)		Non-Treaty Pupils (N=48)		Inter-Group Differences			
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	1	2	3	χ^2 df = 2
IV. Activity	4	Bc > B > D	16.89 ³	Bc ≥ B > D	9.84 ²	-	-	-	ns
	8	Bc > D > B	37.98 ³	Bc > D ≥ B	10.95 ²	-	-	-	ns
	13	D > Bc > B	100.24 ³	D > Bc ≥ B	59.70 ³	-	-	-	ns
	16	Bc > D > B	71.36 ³	Bc ≥ D > B	28.43 ³	-	-	-	ns
	20	Bc > D > B	59.70 ³	D ≥ Bc > B	36.78 ³	x	-	-	N/A
Activity Area Pattern		Bc ≥ D > B		D ≥ Bc > B		1D			
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 2		Within-Area Preferences Reaching .001 level . . . 2					

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0Dzero distance

1Done-distance difference

2Dtwo-distance difference

3Dthree-distance difference

Relational Value Orientation Area

The three possible value orientations in the Relational area are: Lineality (L), Collaterality (C); and Individualism (I).

Item 1: Choice of Delegate. Treaty pupils, in a homogeneity of overall item response below the .05 level, chose the pattern Collaterality over Individualism over Lineality ($C > I \geq L$). Non-Treaty pupils, with an even lower homogeneity of response patterns, chose Individualism over Lineality over Collaterality ($I \geq L \geq C$). The relatively high homogeneity of the Treaty pupils in their preference for Collaterality over Individualism contrasts with the lack of homogeneity of patterning of the Non-Treaties. The two groups display a two-distance difference in pattern type.

Item 7: Help in Misfortune. Treaty pupils chose Lineality over Collaterality over Individualism ($L > C > I$), significant at the .001 level, while Non-Treaties chose Lineality over Individualism over Collaterality ($L > I > C$), also homogeneous overall at the .001 level. The two samples display a one-distance difference in pattern type.

Item 15: Family Work Relations. Treaty pupils displayed homogeneity in overall patterning at a level exceeding .001 in their pattern of Collaterality over Lineality over Individualism ($C > L > I$). Non-Treaty pupils, with homogeneity not reaching the .05 level, chose the same pattern, $C \geq L \geq I$. No difference in pattern type was thus found between the two groups.

Item 21: Leaving Residential School. Treaty pupils chose Lineality

over Collaterality over Individualism ($L > C \geq I$), with overall item homogeneity at the .001 level. Non-Treaty pupils chose Lineality over Individualism over Collaterality ($L > I \geq C$), homogeneous overall at the .01 level. These findings represent a one-distance difference in pattern type between the two samples.

Total Pattern: Relational Value Orientation Area

Combining the frequencies of responses to all items in the Relational Area produced a composite pattern for Treaty pupils of Lineality over Collaterality over Individualism ($L > C > I$). Non-Treaty pupils chose the pattern Lineality over Individualism over Collaterality ($L \geq I \geq C$). A one-distance difference in pattern type thus exists between the groups. In pairs of area alternatives, homogeneity of preference exceeded the .05 level with the Treaty sample, but failed to reach the .05 level in the Non-Treaty sample.

No significant χ^2 values were found between similarly-ordered items.

Discussion

The lack of homogeneity of preferences in the Non-Treaty sample compared with the Treaty sample appears to be a finding of some importance, according to the Kluckhohn theory. Such a finding suggests that the Non-Treaties are in a more rapid state of cultural transition than are the Treaties. The emergence of the Individualism orientation is interesting,

as evidenced by the Non-Treaties placing it in two first-order positions and three second-order positions, contrasted with the Treaty rank-orderings giving Individualism one first-order position, two second-order positions, but four third-order positions. This shift towards Individualism among the Non-Treaties appeared most pronounced in the items Choice of Representative, Help in Misfortune, and Leaving Residential School. It could be posited that this is evidence of the Non-Treaty Indians emerging from the paternalism of the typical relationship between Treaty Indian and the Government of Canada.

Of considerable interest is the rather large difference in homogeneity of response, even though the same preference ordering exists, in the Family Work Relations item, where the Non-Treaties were quite indecisive in all pairs of alternatives; the Treaties, very decisive. Possibly the traditional Indian solidarity among Non-Treaty family groups is diminishing in the Wabasca area.

The one-distance difference in total area patterning indicates that considerable cultural transition may be taking place in Wabasca between Treaty and Non-Treaty pupil groups.

Time Value Orientation Area

The three possible value orientations in the Time area are: Past (Pa), Present (P), and Future (F).

Item 5: Ideas About Change. Although the homogeneity of response patterns was low in this item (Treaty pupils' responses did not reach the .01 confidence level, and Non-Treaties' responses were barely above chance

answering), a two-distance difference was found between the groups. The Treaty pattern was Present over Future over Past ($P \geq F \geq Pa$), while the Non-Treaty pattern became Past preferred to Present, which was equally preferred to Future ($Pa \geq P = F$).

Item 17: Changes in Church Services. Treaty Indian pupils chose the pattern Future over Present over Past ($F > P > Pa$) in this item, homogeneous overall at the .001 level of significance. Non-Treaties, in contrast, rank-ordered their preferences Present over Future over Past ($P \geq F > Pa$) homogeneous at the .01 level. The groups thus displayed a one-distance difference in pattern type.

Item 24: Sudden Community Wealth. Treaty pupils were found to have a linked first-order preference in this item--Past was equally preferred to Future which in turn was preferred to Present ($Pa = F > P$), but with a total item homogeneity at the .001 level. Non-Treaties chose a Future preferred to Past preferred to Present ordering ($F \geq Pa > P$), significant overall at the .01 level. The homogeneity in both groups lay in the rejection of the Present alternative in favor of either Future or Past orientations.

Total Pattern: Time Value Orientation Area

Combining the findings on the six items in the Time area produced an area pattern identical in both groups--Future preferred to Present preferred to Past ($F > P > Pa$), with internal homogeneity at the .05 confidence level or better. A zero distance thus exists between pattern

types of Treaty and Non-Treaty Indian pupils in Wabasca in the Time value orientation area.

No significant χ^2 values were found between similarly-ordered items.

Discussion

The very low homogeneity of response patterns concerning the possibilities of change could be interpreted to mean that Indian pupils see little use in education as a means to improve their lot. The homogeneity of the Non-Treaty pupils' responses, lying almost at chance, could indicate that they are even less sure of the future than are the Treaty pupils.

The rejection of the Past orientation among the pupils in the item concerning changes in church services is of some interest, but difficult to explain is the dominant Future orientation of the Treaty pupils contrasted with the dominant Present orientation of the Non-Treaties in the same item.

The linked first-order preference of Treaty pupils, equating Past and Future positions in the Sudden Community Wealth item could indicate an attachment to the paternalism of the federal government in Indian affairs. The Non-Treaty pupils, in contrast, placed Future over Past in this item, although not strongly so, but in so doing might be thought to be rejecting paternalism. However, in both these findings, the unsatisfactory nature of the item itself must be kept in mind. There appears to be a mixture of Time and Relational concepts within the item, which could have reduced the homogeneity of responses.

Although three type differences were found in the Time area, in individual items, congruence in total area patterning was found to exist. Implications for program development for Treaty and Non-Treaty pupils in this area are probably, therefore, few.

Man-Nature Value Orientation Area

The three possible orientations in the Man-Nature area are:

Subject-to-Nature (S), Harmony-with-Nature (H), and Mastery-over-Nature (M).

Item 6: Facing Conditions. Treaty pupils chose the ordering Subject-to-Nature preferred to Mastery-over-Nature preferred to Harmony-with-Nature ($S > M > H$), significant in overall item homogeneity at the .05 level. Non-Treaty pupils, in contrast, chose the ordering Subject-to-Nature preferred to Harmony-with-Nature preferred to Mastery-over-Nature ($S \geq H \geq M$), but with a level of homogeneity of responses which failed to reach .05. Treaty pupils were firm in their preferences for alternatives within the item, all such preferences reaching the .05 level. The Non-Treaty pupils were, by contrast, quite indecisive, none of the alternative pairs being chosen frequently enough for the pattern to reach the .05 level. The samples displayed a one-distance difference in pattern type, with neither group showing a high degree of homogeneity of responses.

Total Pattern: Man-Nature Value Orientation Area

Combining the responses on the five items in the Man-Nature

orientation produces a composite pattern for Treaty Pupils of Subject-to-Nature preferred to Mastery-over-Nature preferred to Harmony-with-Nature ($S \geq M \geq H$), a pattern in which none of the three alternative pairs of preferences reach the .05 level of homogeneity of response. The Non-Treaty pupils chose the same pattern ($S > M \geq H$), but only one of the preference pairs (Mastery preferred to Harmony) failed to reach the .05 level of significance.

Examination of individual item homogeneity reveals greater decisiveness on the part of the Treaty pupils, but the summing of the frequency of responses in the five items produces a total area pattern of considerable ambivalence. The Non-Treaty pupils, although apparently more indecisive in individual items, displayed greater homogeneity when the frequency of responses was summed over the five items. In general, it may be said that for both Treaty and Non-Treaty pupils, one of the interesting characteristics of the response patterns in the Man-Nature area is their relative indecisiveness.

No significant χ^2 values were found between similarly-ordered items.

Discussion

The greater homogeneity of the Non-Treaty pupils in choosing Subject-to-Nature as their dominant orientation may be a reflection of the belief expressed in Wabasca during the investigation that Treaty Indians can get ahead faster than Non-Treaties, because of the benefits accruing under the provisions of the Treaties.

Activity Value Orientation Area

The three possible orientations in the Activity area are: Being (B); Being-in-Becoming (Bc); and Doing (D).

Item 20: Women in the Modern World. Treaty pupils chose Being-in-Becoming preferred to Doing preferred to Being ($Bc > D > B$), homogeneous beyond the .001 level. Non-Treaties chose Doing preferred to Being-in-Becoming preferred to Being ($D \geq Bc > B$), homogeneous beyond the .001 level. The two groups thus displayed a one-distance difference in pattern type. Treaty pupils were quite homogeneous in their rankings, but Non-Treaties vacillated somewhat between Doing and Being-in-Becoming as their dominant orientation.

Total Pattern: Activity Value Orientation Area

Combining the frequency of responses to the five items in the Activity area produced a composite pattern for the Treaty pupils of Being-in-Becoming preferred to Doing preferred to Being ($Bc \geq D > B$) and for the Non-Treaties, Doing preferred to Being-in-Becoming preferred to Being ($D \geq Bc > B$). These two patterns represent a one-distance difference in type. Both groups were ambivalent about their dominant orientation.

No significant χ^2 values were found in similarly-ordered items.

Discussion

Although the patterns of the Treaty and Non-Treaty pupils differed only in the "Women in the Modern World" item, it is of some interest that internal homogeneity in all other items was consistently greater among

Treaty than among Non-Treaty pupils. The outstanding finding in the Activity area is the decisive rejection of the Being value orientation and the homogeneity of preferences for self-developmental or self-actualizing activities, the core of the Being-in-Becoming value orientation.

Testing Hypothesis Seven

Hypothesis Seven predicted no significant differences between the value orientation patterns of adolescent Treaty Indian pupils and those of adolescent Non-Treaty pupils. Reference to Table XXXV, a summary of the type differences and homogeneity of response differences of the two groups reveals the following:

A. Type Differences in Value Orientations

Man-Nature area (First-order choice) 1 (1D)

B. Homogeneity of Response Differences

1. Homogeneity of item patterning (S/m)

Net difference between groups in items failing
to reach .05 level of statistical significance . . 3

2. Homogeneity of area patterning (binomial)

Net difference in pairs of alternatives at or
above .001 level of significance 2

Applying the decision rule given in Chapter IV,¹ the null hypothesis of no difference between adolescent Treaty Indian pupils and adolescent Non-Treaty Indian pupils must be rejected. Criterion A reveals sufficient difference

¹*Supra*, p. 112.

TABLE XXXV

DIFFERENCES IN VALUE ORIENTATIONS OF TREATY AND NON-TREATY PUPILS
BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Value Orientation Area	Type Differences			Homogeneity of Response Patterns Differences				
	Area Distances			Number of Items Below .05 Level of Significance (S/m)		Number of Area Pairs of Alternatives Above .001 Level of Signif. (Binomial)		
				Treaty Indians	Non-Tr. Indians	Net Diff.	Treaty Indians	Non-Treaty Indians
	1D	2D	3D					Net Difference
I. Relational	1	-	-	1	2	-1	3	0
II. Time	-	-	-	1	1	0	3	3
III. Man-Nature	-	-	-	0	2	-2	0	1
IV. Activity	1	-	-	0	0	0	2	2
Total	2	-	-	2	5	-3	8	6
								2

in pattern type to conclude that the value criterion patterns of adolescent Treaty Indian pupils differ significantly from those of adolescent Non-Treaty Indian pupils.

Hypothesis Seven was therefore not supported.

II. VALUE ORIENTATION PATTERNS OF TEACHERS RECRUITED IN THE UNITED KINGDOM IN 1965 AND ALL OTHER NORTHLAND TEACHERS

Table XXVI presents the item-by-item findings for teachers recruited in the United Kingdom in 1965 and for all other teachers and administrators in Northland School Division #61 in the school year 1965/66. The table shows the rank-ordering of preferences, distance between rank-orderings of the two groups, homogeneity of overall item responses (Kendall's "S" divided by the number of respondents), frequency of within-area preference pairs reaching the .001 level of statistical significance (measured by binomial analysis), and χ^2 values for differences in homogeneity of item patterning with similarly-ordered items. In view of the detailed presentation already made of the value orientation patterns of teachers and administrators in Northland School Division #61 in 1965/66, this chapter will treat only those items where type differences or large differences in homogeneity were found between the two groups. Following presentation and discussion of the findings, the decision is given concerning the acceptance or rejection of Hypothesis Eight.

The three possible value orientations in the Relational area are: Lineality (L), Collaterality (C), and Individualism (I).

Item 7: Help in Misfortune. U.K. teachers preferred the pattern Individualism over Lineality over Collaterality ($I \geq L \geq C$), but with a homogeneity of response below the .05 level of significance. Other teachers chose the pattern Lineality over Individualism over Collaterality ($L \geq I \geq C^*$), homogeneous at the .001 level. The two groups thus display a one-distance difference in pattern type.

Item 11: Allocation of Recreation Grant. U.K. teachers chose the pattern Collaterality over Lineality over Individualism ($C \geq L \geq I^*$), homogeneous at the .05 level of confidence. All other teachers chose the pattern Collaterality over Individualism over Lineality ($C > I \geq L^*$), homogeneous beyond the .001 level. A one-distance difference was thus found between the two groups.

Item 14: Wage Work. U.K. teachers chose the pattern Individualism over Collaterality over Lineality ($I \geq C \geq L$) but the homogeneity of response patterns failed to reach the .05 level of significance. All other teachers, in contrast, selected the rank-ordering Lineality over Individualism over Collaterality ($L \geq I > C$), homogeneous overall at the .01 level of significance. A two-distance difference in pattern type was thus found between the two groups. The indecisiveness of the U.K. teachers is demonstrated in the internal lack of homogeneity, as none of the choices in the three pairs of alternatives reached the .05 level of confidence. All other teachers were somewhat ambivalent between Lineality and Individualism as their first-order choice, but the other two alternative pairs were significant at the .05 level.

TABLE XXXVI

RANK-ORDERING, HOMOGENEITY OF RESPONSE PATTERNS, AND ORDERING DISTANCE OF UNITED KINGDOM TEACHERS AND ALL OTHER TEACHERS

Value Orientation Area	Item	United Kingdom Teachers		All Other Teachers		Inter-Group Differences		
		Rank-Ordering	Homogeneity of Response (S/m)	Rank-Ordering	Homogeneity of Response (S/m)	Distance	χ^2	df = 2
I. Relational	1	C \geq I \geq L	11.55 ²	C \geq I > L	29.82 ³	- - -	ns	
	7	I \geq L \geq C	4.21	L \geq I \geq C*	13.36 ²	x - -	N/A	
	11	C \geq L \geq I*	8.15 ¹	C > I \geq L*	15.93 ³	x - -	N/A	
	14	I \geq C \geq L	3.75	L \geq I > C	10.06 ²	- x -	N/A	
	15	I \geq C > L	8.03 ¹	C \geq I \geq L*	16.72 ³	x - -	N/A	
	18	I > L > C	27.11 ³	I > L > C	72.51 ³	- - -	ns	
	21	L > C \geq I	39.20 ³	L > C \geq I	99.25 ³	- - -	ns	
Relational Area Pattern		I \geq L \geq C		I > L > C		0D		
Homogeneity of Preferences (Binomial Analysis)		Within-Area Preferences Reaching .001 level . . . 0		Within-Area Preferences Reaching .001 level . . . 0				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXXVI (continued)

Value Orientation Area	Item	United Kingdom Teachers		All Other Teachers		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance 1 2 3	χ^2 df = 2	
II. Time	3	P > F > Pa	56.03 ³	P > F > Pa	129.89 ³	- - -	ns	
	5	F ≥ P > Pa	25.91 ³	F > P > Pa	89.20 ³	- - -	ns	
	10	P ≥ F > Pa	46.58 ³	P > F > Pa	101.44 ³	- - -	ns	
	17	P ≥ F ≥ Pa	7.28 ¹	P ≥ F > Pa	58.34 ³	- - -	ns	
	19	F > P > Pa	60.61 ³	F > P > Pa	155.74 ³	- - -	ns	
	24	F > Pa > P	33.45 ³	F > Pa > P	96.09 ³	- - -	ns	
Time Area Pattern		F ≥ P > Pa		F > P > Pa		0D		
Homogeneity of Prefer- ences (Binomial Analysis)		Within-Area Prefer- ences Reaching .001 level . . . 2		Within-Area Prefer- ences Reaching .001 level . . . 3				

ns not significant
1significant at the .05 level
2significant at the .01 level
3significant at the .001 level
N/A not applicable
0D zero distance
1D one-distance difference
2D two-distance difference
3D three-distance difference

TABLE XXXVI (continued)

Value Orientation Area	Item	United Kingdom Teachers		All Other Teachers		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance 1 2 3	χ^2 df = 2	
III. Man-Nature	2	M > H > S	25.88 ³	M > H > S	60.88 ³	- - -	ns	
	6	M > H ≥ S	21.56 ³	M > H ≥ S*	16.11 ³	- - -	ns	
	9	M > H ≥ S	12.95 ³	M > H ≥ S	17.39 ³	- - -	ns	
	12	M > H > S	54.38 ³	M > H > S	121.20 ³	- - -	ns	
	22	M > S ≥ H	17.36	M > H ≥ S*	21.34	x - -	N/A	
Man-Nature Area Pattern		M > H > S		M > H > S		OD		
Homogeneity of Prefer- ences (Binomial Analysis)		Within-Area Prefer- ences Reaching .001 level . . . 3		Within-Area Prefer- ences Reaching .001 level . . . 3				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

OD zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

TABLE XXXVI (continued)

Value Orientation Area	Item	United Kingdom Teachers		All Other Teachers		Inter-Group Differences		
		Rank- Ordering	Homogeneity of Response (S/m)	Rank- Ordering	Homogeneity of Response (S/m)	Distance 1 2 3	χ^2 df = 2	
IV. Activity	4	Bc \geq D \geq B*	11.86 ²	D \geq Bc > B	46.46 ³	x - -	N/A	
	8	Bc \geq B \geq D	12.76 ²	Bc > D > B	64.05 ³	x - -	N/A	
	13	D \geq B \geq Bc	2.60	D > Bc \geq B	21.69 ³	x - -	N/A	
	16	Bc \geq B \geq D*	16.01 ³	Bc > D > B	66.84 ³	x - -	N/A	
	20	Bc > B > D	40.51 ³	Bc > B \geq D	82.43 ³	- - -	ns	
Activity Pattern Area		Bc > B \geq D		Bc > D > B		1D		
Homogeneity of Prefer- ences (Binomial analysis)		Within-Area Prefer- ences Reaching .001 level . . . 2		Within-Area Prefer- ences Reaching .001 level . . . 3				

ns not significant

¹significant at the .05 level

²significant at the .01 level

³significant at the .001 level

N/A not applicable

0D zero distance

1D one-distance difference

2D two-distance difference

3D three-distance difference

Item 15: Family Work Relations. U.K. teachers chose the pattern Individualism preferred over Collaterality preferred over Lineality ($I \geq C > L$), homogeneous at the .05 level of significance. All other teachers preferred the pattern Collaterality over Individualism over Lineality ($C \geq I \geq L^*$), significant in homogeneity of response at the .001 level. A one-distance difference in pattern type was thus found between the groups. The U.K. teachers were somewhat ambivalent in their first-order choice between Individualism and Collaterality, but firm in the other two pairs of alternatives. All other teachers were decisive about preferring Collaterality over Lineality, but less certain about the other pairs.

Total Pattern: Relational Value Orientation Area

Combining the frequency of responses in all seven items of the Relational area produced a composite value orientation pattern for the U.K. teachers of Individualism preferred to Lineality preferred to Collaterality ($I \geq L \geq C$). All other teachers preferred the same pattern ($I > L > C$) but with considerably more internal homogeneity of responses. Zero distance between the two groups exists, therefore, in pattern type.

No significant χ^2 values on similarly-ordered items were found.

In terms of homogeneity of response patterns, the United Kingdom teacher sample was considerably less decisive in its patterning. Two items failed to reach the .05 level of significance, two reached the .05 level, one reached the .01 level, and two were significant at the .001 level. In contrast, only one item in the Canadian teachers' group failed to reach the .01 level, and six were significant at the .001 level.

Discussion

Kluckhohn postulates in her theory that the Relational value orientation area is the most important of the four areas, when evaluating the severity of cultural transition. Following this line of reasoning, it is noted that teachers recruited in the United Kingdom in 1965 diverge in ordering distance from all other teachers on four items in the Relational area. From this it might be inferred that United Kingdom teachers might have some difficulty in making the transition to some specific Canadian values, although the rank-ordering of the two groups was similar in the total area. Certain behavior spheres appear to elicit quite divergent value orientations, although with generally lower levels of homogeneity of response. These lower homogeneity levels could indicate a culture already in transition. The popularity of the Individualism value orientation among the United Kingdom teachers could be hypothesized to be a reflection of the traditional independence of the English, or possibly of the values of a group of highly-selected individuals seeking a new way of life, or "adventure."

Time Value Orientation Area

The three orientations possible in the Time area are: Past (Pa), Present (P), and Future (F).

No type differences in pattern were found between the United Kingdom and all other teachers in the Time area, either in items or area. In addition, the patterns found were identical with those found for all teachers, as set forth in Table XXIV.

Some homogeneity of response differences were found. In the total Time area, United Kingdom teachers were somewhat indecisive in their choice between Future and Present in the pattern $F \geq P > Pa$, whereas all other teachers rank-ordered their responses $F > P > Pa$. In individual item homogeneity, United Kingdom teachers' responses ranked consistently lower than all other teachers, especially so in Item 17, "Ceremonial Innovation," where responses attained the .05 level in comparison with the .001 level recorded for all other items. In internal preference pairs, five of these failed to reach significance in the U.K. sample, but only one failed to do so among all other teachers.

In summary, although the actual response patterns of the two groups did not vary in type, the U.K. teachers were found to be somewhat less homogeneous in their preferences through the Time value orientation area.

No significant χ^2 values were found between similarly-ordered items.

Discussion

The ambivalence of the United Kingdom teachers in their choices could be hypothesized to lend support to the position that the group is undergoing a process of cultural transition, although not as marked as in the Relational area. The lack of internal homogeneity on the total item patterning in the choice between Present and Future as the dominant orientation is in some contrast to the sample of remaining teachers, where a clear-cut preference was found for Future over Present over Past ($F > P > Pa$).

Man-Nature Value Orientation Area

The three possible orientations in the Man-Nature area are: Subject-to-Nature (S), Harmony-with-Nature (H), and Mastery-over-Nature (M).

Item 22: Hunting, Fishing, and Trapping. United Kingdom teachers rank-ordered their preferences in this item Mastery-over-Nature preferred to Subject-to-Nature preferred to Harmony-with-Nature ($M > S \geq H$), homogeneous overall at the .001 level. All other teachers preferred Mastery-over-Nature to Harmony-with-Nature to Subject-to-Nature ($M > H \geq S^*$), homogeneous overall at the .001 level. The two groups were thus one-distance apart in type of pattern. Both groups were somewhat undecided about the position of Subject-to-Nature versus Harmony-with-Nature, but the United Kingdom teachers placed Subject-to-Nature second, all other teachers, third.

In all other items, the pattern types did not differ between the two groups of teachers, and with the exception of the greater homogeneity of all other teachers on Item 2 and Item 12, the general level of homogeneity of response was similar.

Total Pattern: Man-Nature Orientation Area

Combining the frequencies of the five items in the Man-Nature area produced a total area pattern for the United Kingdom teachers and all other teachers of Mastery preferred to Harmony preferred to Subject ($M > H > S$). All internal preference pairs were significant at the .05 level.

No significant χ^2 values were found between groups, on similarly-ordered items.

Discussion

The rejection of the Subject orientation by both groups of teachers is the most interesting finding in this value orientation area. True, it does reach second place in the "Hunting, Fishing, and Trapping" item for the U.K. teachers, but this could possibly be accounted for by the fact that hunting and fishing are popular with many individuals from the United Kingdom. Such individuals may have developed some feeling for the ways in which Nature can outwit man in this behavior sphere.

In summary, the Man-Nature value orientation area was found to be the area with the greatest between-group congruence of value orientations in United Kingdom and all other teacher samples.

Activity Value Orientation Area

The three possible positions in the Activity value orientation area are: Being (B), Being-in-Becoming (Bc), and Doing (D).

Item 4: Job Choice. United Kingdom teachers chose Being-in-Becoming over Doing over Being ($Bc \geq D \geq B^*$) in this item, significant overall at the .01 level of homogeneity. All other teachers chose Doing over Being-in-Becoming over Being ($D \geq Bc > B$), significant overall at the .001 level. The two groups are thus separated by a one-distance difference in pattern type.

Both groups were ambivalent about the choice between Doing and Being-in-Becoming, but the United Kingdom teachers favored Being-in-Becoming slightly, all other teachers, Doing, for the first-order preference.

The rejection of the Being orientation was quite marked in the Canadian sample, less marked in the United Kingdom sample.

Item 8: Ways of Living. United Kingdom teachers chose the pattern Being-in-Becoming preferred to Being preferred to Doing ($B_c \geq B \geq D^*$), homogeneous overall at the .01 level of significance. All other teachers chose the pattern Being-in-Becoming preferred to Doing preferred to Being ($B_c > D > B$), significant overall at the .001 level of homogeneity of response. United Kingdom teachers were ambivalent in their choice between Being-in-Becoming and Being as the dominant value orientation, but favored Being-in-Becoming slightly. The relegation of Doing to last position was observed, although the internal choice between it and Being-in-Becoming was significant at the .05 level in favor of Doing. The other teachers, in contrast to the indecisiveness of the U.K. teachers, made all their internal preferences clear. A one-distance difference in pattern type was found between the groups.

Item 13: Housework. The United Kingdom teachers chose Doing preferred to Being preferred to Being-in-Becoming ($D \geq B \geq B_c$), but without sufficient homogeneity of response to reach the .05 level. All other teachers chose Doing preferred to Being-in-Becoming preferred to Being ($D > B_c \geq B$), significant overall at the .001 level. A one-distance difference in pattern type thus existed between the two groups. Considering homogeneity of response patterns, the U.K. teachers failed to reach the .05 level of significance on the three internal preference pairs in the item, whereas all other teachers were indecisive only in the choice between

Being-in-Becoming and Being for third-order position.

Item 16: Non-Working Time. United Kingdom teachers preferred Being-in-Becoming over Being over Doing ($B_c \geq B \geq D^*$), significant overall at the .001 level. All other teachers chose the pattern Being-in-Becoming over Doing over Being ($B_c > D > B$), significant overall at .001 level. In terms of internal preference pairs, the U.K. teachers were quite ambivalent, only the preference for Being-in-Becoming over Doing reaching the .05 level. All other teachers were much more homogeneous, and showed clear-cut rank-ordering at or above the .05 level.

Total Pattern: Activity Value Orientation Area

Combining the findings from the five items in the Activity area produced a composite pattern among the United Kingdom teachers of Being-in-Becoming preferred to Being preferred to Doing ($B_c > B \geq D$), and among all other teachers a pattern of Being-in-Becoming preferred to Doing preferred to Being ($B_c > D > B$). A one-distance difference thus existed between the two samples. In internal preferences for pairs of alternatives, United Kingdom teachers gave a slightly larger preference to Being as opposed to Doing, for the second-order position. For the all other teachers' sample, homogeneity of responses in preference pairs in the area reached the .05 level of significance.

No significant χ^2 values were found between groups on similarly-ordered items.

Discussion

The major finding in the Activity area was the relative popularity of the Being-in-Becoming orientation, which was found dominant

in seven out of ten items. A second finding of some interest is the higher popularity of the Being orientation among the United Kingdom teachers than among all other teachers. United Kingdom teachers placed it in second-order position four out of five times, while all other teachers placed it in third position four out of five times. This finding could lend support to the view that the culture of the United Kingdom places a high value upon the expression of what each individual conceives to be given in his personality, regardless of whether or not this expression produces some achievement valued by others.

Once again, the generally lower level of homogeneity of response patterns of the United Kingdom sample represents a lack of decisiveness in value orientations which may indicate a society in cultural transition. In the total Activity area ordering, the placement of the Being orientation in a second-order position creates a one-distance difference between the United Kingdom teachers and Indian parents, Indian pupils, and all other teachers. This could again indicate possible difficulties in adjustment to Canadian values.

Testing Hypothesis Eight

Hypothesis Eight predicted significant differences in value orientation patterns between teachers recruited in the United Kingdom in 1965 and all other teachers and administrators in Northland School Division #61 in the school year 1965/66. Reference to Table XXXVII, a summary of the type and degree of homogeneity of response patterns of both United Kingdom and all other teachers, reveals the following differences:

TABLE XXXVII
DIFFERENCES IN VALUE ORIENTATIONS OF UNITED KINGDOM TEACHERS AND ALL OTHER TEACHERS
BY TYPE AND DEGREE OF HOMOGENEITY OF RESPONSE PATTERNS

Value Orientation Area	Type Differences			Homogeneity of Response Patterns Differences					
				Number of Items Below .05 Level of Significance (S/m)			Number of Area Pairs of Alternatives Above .001 Level of Signif. (Binomial)		
	Area Distances			U.K. Tchrs.	All other Teachers	Net Diff.	U.K. Tchrs.	All other Teachers	Net Diff.
	1D	2D	3D						
I. Relational	-	-	-	2	0	2	0	0	0
II. Time	-	-	-	0	0	0	2	3	-1
III. Man-Nature	-	-	-	0	0	0	3	3	0
IV. Activity	1	-	-	1	0	1	2	3	-1
Total	1	-	-	3	0	3	7	9	-2

A. Type Differences in Value Orientations

Activity area (Second-order choice) 1 (1D)

B. Homogeneity of Response Pattern Differences

1. Homogeneity of item patterning (S/m)

Net difference between groups in items failing
to reach .05 level of statistical significance . . . 3

2. Homogeneity of area patterning (binomial analysis)

Net difference in pairs of alternatives at or
above .001 level of statistical significance. . . 2

Applying the decision rule given in Chapter IV,² the null hypothesis of no difference between groups must be accepted. No significant differences exist between the value orientation patterns of teachers recruited in the United Kingdom in 1965 and all other teachers and administrators in Northland School Division #61 in 1965/66. Evidence from individual items, however, reveals eight one-distance and one two-distance differences in item patterns between the two samples. Therefore, it can be said that in individual behavior spheres, considerable divergence was found between United Kingdom and all other teachers.

In summary, although Hypothesis Eight was not supported in terms of the decision rule of the study, trends were found indicating differences.

III. MISCELLANEOUS ITEMS

Included in the schedule administered to parents and pupils were three items which did not follow the Kluckhohn rationale. Item 23 (Types

²*Supra*, p. 112.

of Discipline), Item 25 (Occupations), and Item 26 (Learning English) sought to probe specific areas in the educational program which have proven difficult to handle in schools serving pupils of Indian ancestry. The teachers' and administrators' schedule included only Item 23 and Item 25 over and above the Kluckhohn-type items. Each of the three items will now be analyzed and discussed in terms of the purpose of the whole study.

Item 23: Types of Discipline

Although constructed according to Kluckhohn methodology, Item 23 did not follow the theory of dominant and variant value orientations. The purpose of the item was to discover, if possible, what differences existed between the outlook of the parents, of the pupils, and of the teachers on the subject of discipline. Three possible types were postulated, which were tentatively labelled as Physical (P), Emotional (E), and Insightful (I). Simulated life situations were constructed by the Kluckhohn method to test preference patterns among the three groups. Table XXXVIII presents the results.

TABLE XXXVIII

RANK-ORDERING OF PREFERENCES OF PARENTS, PUPILS, AND
TEACHERS FOR DIFFERING TYPES OF CLASSROOM DISCIPLINE[†]

Parents	Pupils	Teachers
I ≥ E > P	I > E ≥ P	I > P > E

[†]Symbols in the table are interpreted as follows: P = Physical discipline; E = Emotional discipline; I = Insightful discipline.

Parents preferred Insightful over Emotional over Physical ($I \geq E > P$), with an overall item homogeneity at the .001 level. Some ambivalence was noted in the first-order choice between Insightful and Emotional. Pupils chose Insightful over Emotional over Physical ($I > E \geq P$), with overall item homogeneity beyond .001. Some ambivalence was noted in choosing between Emotional and Physical. Teachers, in contrast to parents and pupils, rank-ordered their preferences as Insightful over Physical over Emotional ($I > P > E$). Homogeneity within the item lay beyond .001.

Discussion. Insightful discipline emphasizes polite but firm teacher behavior, coupled with an attempt to convey understanding of the expectations of the teacher. The second-order preference among the Indian samples for Emotional leads to the query as to whether the respondents were answering the question from the standpoint of what is most effective for the teacher, rather than most preferred by the pupil. The sensitivity of the Indian towards personal remarks, and appearing either "stupid" or "a big shot" would suggest that the replies were given from the standpoint of the best way to obtain control, not what the children preferred. The teacher responses, placing Emotional last, could indicate an understanding of the basic concepts of psychology in the fields of personality development and learning theory. A number of teachers, in narrative comments on the item, suggested that the three alternatives did not exhaust the range of disciplinary styles, but the purpose of the item was to probe three general areas rather than delineate more specific styles.

In sum, no basic conflict in expectations of appropriate disciplinary styles emerge from the findings.

Item 26: Learning English

The purpose of this item was to elicit attitudes towards different methods of learning English as a second language. Three varying styles of second-language learning, all familiar to teachers of Indian pupils, were placed in a simulated real-life situation, by the Kluckhohn method, and the preferences of Indian parents and pupils tested. The item was not run with teachers, as it was assumed that many of them would not have met the situation personally in their own life histories. The three types of methods of learning English were labelled tentatively as Translating (Tr), Thinking in English (Th), and Rote Memorization (R). Table XXXIX presents the findings from the parent and pupil samples.

TABLE XXXIX

RANK-ORDERING OF PREFERENCES OF PARENTS AND PUPILS
FOR DIFFERING METHODS OF LEARNING ENGLISH AS A SECOND
LANGUAGE

Parents	Pupils
Tr = R > Th	Tr> R >Th

It will be noted that the parents were completely ambivalent as to whether Translating into Cree or Rote Memorization should be placed first, but both were preferred to Thinking in English. The overall homogeneity of the item

was little above chance answering. Pupils, in contrast, were quite homogeneous (beyond the .001 level) in their overall pattern, which placed Translating first, Rote Memorization second, and Thinking in English third.

Discussion. Teachers in Indian schools have become familiar with the ability of Indian pupils to memorize the appearance of words, and practice pronunciation and oral reading until a very good display can be put on. In the past, this was equated with "learning to read." This is probably the process which the Indian parents were responding to in answering this item, a process which they knew was not very effective in learning to understand English. The preference of the pupils for translating into Cree in their minds is preferable to rote memorization, but indicates that the learning situation in the groups tested is still somewhat inefficient. Nevertheless, the quite definite preference of pupils for Translating into Cree over Rote Memorization is an encouraging sign that comprehension is being sought as a goal in learning English.

Item 25: Occupations

The purpose of this item was to attempt to discover the fund of knowledge of occupations possessed by Indian parents and pupils compared with that possessed by teachers and administrators. A secondary purpose was to determine the level of occupations which the three samples would name first. The item was patterned after French's "Name Occupation Test,"⁴

⁴Cecil L. French, "Social Class and Motivation," *The Metis in Alberta Society* (Edmonton: University of Alberta Committee for Social Research, 1963), pp.322-337.

which was also used in northern Alberta by Strong.⁵

A basic assumption behind the test is that asking individuals to name all the occupations they can think of will give a measure of their occupational knowledge. A second assumption is that occupations named first will have greater saliency for the respondent than those named later.

Item 25 consisted of a single sheet, partially lined, containing these instructions: "In the spaces below, please write the names of as many kinds of work (occupations) as you can." Sixteen lines were printed on the parent's and pupil's schedule. The possibility of this suggesting the number to be named will be discussed later. French's technique of limiting the response time to five minutes was not rigidly adhered to, chiefly because of the known aversion of the Indian people to pressures stemming from time limitations. The total number of occupations named was counted, and the first ten named classified as High, Medium, Low, or Very Low status occupations. The classification was based upon the Blishen scale⁶ as follows: High: Blishen classes 1 and 2; Medium: Blishen classes 3, 4, and 5; Low: Blishen classes 6; Very Low: Blishen classes 7.

Two basic hypotheses were made concerning the responses to this item. They were:

⁵Mary Symons Strong, "Social Class and Levels of Aspiration Among Selected Alberta High School Students" (unpublished Master's thesis, the University of Alberta, Edmonton, 1963), p. 168.

⁶Bernard Blishen, "An Occupational Class Scale," *Canadian Society* (B.R. Blishen, F.E. Jones, Kaspar Naegle, and John Porter, eds.) (Toronto: The Macmillan Company of Canada, Limited, 1961), pp. 482-84.

Hypothesis A: The lowest number of occupations will be named by parents, the next lowest by pupils, and the highest number by teachers and administrators.

Hypothesis B: The largest proportion of low and very low occupations will be named by parents, the next largest by pupils, and the smallest proportion by teachers and administrators.

Testing the Hypotheses

Tables XL and XLI present the findings from Item 25. It was found that parents (N=30) named 218 occupations in all, with a mean of 7.2 occupations named. Pupils (N=138) named 1,205 occupations for a mean of 8.7. Teachers and administrators (N=129) named 4,195 for a mean of 33.3 . Hypothesis A thus received powerful support.

Classifying the responses to the first ten occupations named revealed that "High" occupations accounted for 7.5 per cent of the parents' responses, 19.7 per cent of the pupils' responses, and 44.6 per cent of teachers' responses. In the "Medium" category were found 31.2 per cent of parents' responses, 27.6 per cent of pupils' responses, and 31.4 per cent of teachers' responses. The "Low" category contained 13.6 per cent of parents' responses, 10.4 per cent of pupils' responses, and 12.0 per cent of teachers' responses. The "Very Low" category contained the largest proportion of both parents' and pupils' responses--47.7 per cent and 42.3 per cent respectively. The teachers and administrators' responses contained only 11.5 per cent "Very Low" occupations out of the first ten named.

Hypothesis B was thus supported.

TABLE XL

NUMBER AND PROPORTION OF LEVELS OF FIRST TEN OCCUPATIONS
NAMED BY PARENTS, PUPILS, AND TEACHERS.

Level of Occupation Named	Number and Proportions Named					
	Parents No./Per Cent		Pupils No./Per Cent		Teachers No./Per Cent	
High Occupations	15	7.5	196	19.7	557	44.7
Medium Occupations	62	31.2	275	27.6	393	31.6
Low Occupations	27	13.6	104	10.4	150	12.0
Very Low Occupations	95	47.7	422	42.3	144	11.7
Total in First Ten Spaces	199	100.0	997	100.0	1244	100.0

TABLE XLI

TOTAL AND MEAN NUMBER OF OCCUPATIONS NAMED
BY PARENTS, PUPILS, AND TEACHERS

	Parents	Pupils	Teachers
Total Named	218	1205	4195*
Mean	7.2	8.7	33.3

*To correct for the possible suggestibility of the extra four lines on the teacher questionnaire compared with the parent and pupil schedules, this figure could be reduced by 25 per cent, and would then read 3356. The computations for the first ten named occupations are not materially affected, since only seven of the teachers failed to mention at least ten occupations.

Discussion. Comparison of responses of teachers and administrators compared with those of Indian parents and pupils reveals an almost complete reversal of proportions of Very Low and High occupations named by the two groups. Parents named 7.5 per cent High occupations, teachers, 44.6 per cent. Parents named 47.7 per cent Very Low occupations, teachers, 11.5 per cent.

However, all discussion of these findings, and inferences made from them, should take into consideration the attitude of parents and pupils towards the item. During the interviews with parents, extreme tension and reluctance to answer were most noticeable, with some parents refusing completely to answer the question. Several persons terminated the naming abruptly after several responses. Among the pupils, very obvious indecision was observed, with much erasing and re-writing of responses. Since the design of the study did not call for a timed test, considerable extra time beyond the mode of five minutes was allowed, but even this adjustment failed to relieve the tension in the situation.

An hypothesis which could be advanced to help explain the situation is that the Indian may be fully aware of the non-Indian's disapproval of the Indian's reluctance to accept wage employment or to tie himself down to regular hours of work. Undoubtedly welfare officers have made a considerable point of employment as an alternative to welfare, especially in the winter of 1966, when it was reported that over one hundred non-Indian workers were brought into Wabasca by oil companies, while at the same time many able bodied Indian residents were idle and drawing welfare payments. Respondents to the question might have interpreted the item as a veiled reference to the

current situation.

One hypothesis concerning parental and pupil blocking on the item could be that parents assumed some connection between the study and the cutting off of welfare payments to all able-bodied men in Wabasca during the period the investigator was in the settlement. It seems apparent that the limited number of responses cannot be assumed to exhaust the parents' knowledge of occupations.

Teachers, by contrast, seemed only too pleased to demonstrate their fund of knowledge of occupations. Many filled all the space on the paper. The maximum number named was 141. The difference in number of lines on the two types of schedules could also encourage teachers to name more occupations, but since the first ten only were used in the analysis of levels of occupations named, the larger teacher grand total would have little effect upon the computations. Rather than concentrate on the differences in mean number of occupations named, therefore, it would seem more appropriate to consider the large difference in proportion of High and Very Low occupations named by the Indian sample and the non-Indian sample. Implications for guidance, counselling, and vocational education are many. Questions which might be asked could include these: Do the findings represent vocational aspirations as well as knowledge? Can pupils be motivated to seek training and employment in occupations outside their range of experience? Does a relationship exist between these findings and the "Subject-to-Nature" orientation of the pupils?

In summary, if one of the goals of education is to pass on the

various facets of the dominant culture, Indian schools seem to have fallen somewhat short of the goal in the area of occupational knowledge of the pupils. However, it is worthy of note that pupils named a somewhat higher proportion of High occupations (19.7 per cent) than did their parents (7.5 per cent), an encouraging increase between the generations.

IV. SUMMARY

In this chapter were presented the findings concerning the value orientation patterns of Treaty and Non-Treaty pupils, of teachers recruited in the United Kingdom in 1965, and all other teachers in Northland School Division #61 in the school year 1965/66, and of the miscellaneous items Types of Discipline, Occupations, and Learning English.

Value Orientation Patterns of Treaty Pupils and of Non-Treaty Pupils

In the Relational value orientation area, a one-distance type difference was found between the groups, indicating the significant fact that Non-Treaty pupils had hesitantly placed Individualism in a second-order position rather than third-order, as did the Treaty pupils. Much greater homogeneity of preferences was found in the Treaty than in the Non-Treaty sample. In individual items, type differences were found in the Choice of Delegate, Help in Misfortune, and Leaving Residential School items.

In the Time value orientation area, both groups chose Future preferred to Present preferred to Past, with high homogeneity on all items except Expectations About Change.

In the Man-Nature value orientation area, both groups chose Subject-to-Nature preferred to Mastery-over-Nature preferred to Harmony-with-Nature. Non-Treaty pupils were somewhat more homogeneous in their preferences in this area than were Treaty pupils. In individual items, a type difference was found in the item Facing Conditions.

In the Activity value orientation area, a one-distance type difference was found between the groups. Treaty pupils chose Being-in-Becoming preferred to Doing preferred to Being, whereas Non-Treaty pupils chose Doing preferred to Being-in-Becoming preferred to Being. Homogeneity of preferences was uniformly higher among the Treaty than among the Non-Treaty pupils. In terms of individual items, a type difference was found in the item Women in the Modern World.

Following the testing of Hypothesis Seven, it was concluded that significant differences do exist between the pattern of adolescent Treaty Indian pupils and that of adolescent Non-Treaty Indian pupils.

Value Orientation Patterns of United Kingdom Teachers and All Other Teachers and Administrators

In the Relational value orientation area, both groups chose Individualism preferred to Lineality preferred to Collaterality, but much lower homogeneity of preferences was found in the United Kingdom than in the all other teachers sample. Type differences were found in the items Help in Misfortune, Allocation of Recreation Grant, Wage Work, and Family Work Relations. This could indicate serious cultural tensions between the two samples.

In the Time value orientation area, both groups chose Future preferred to Present preferred to Past. Again the United Kingdom teachers showed uniformly less homogeneity of preferences than did all other teachers. No type differences were found between groups in individual items.

In the Man-Nature area, both groups chose Mastery-over-Nature preferred to Harmony-with-Nature preferred to Subject-to-Nature. United Kingdom teachers were generally lower in homogeneity of preference than all other teachers. In individual items, a type difference was found in the item Hunting, Fishing, and Trapping.

In the Activity value orientation area, a one-distance type difference was found. United Kingdom teachers chose Being-in-Becoming preferred to Being preferred to Doing, whereas all other teachers chose Being-in-Becoming preferred to Doing preferred to Being. Again, United Kingdom teachers were consistently lower to a considerable degree in the homogeneity of their preferences. Type differences were found in the Job Choice, Ways of Living, Housework, and Non-Working Time items.

In testing Hypothesis Eight, it was concluded that no significant differences exist in the value orientation patterns of United Kingdom teachers recruited in 1965 and all other teachers in Northland School Division #61 in the school year 1965/66. However, the presence in the United Kingdom sample of almost uniformly lower homogeneity of preferences, and of type differences between groups in nine out of twenty-three items indicates the possibility of considerable stress arising between the two samples as a result of value orientation patterns in certain behavior spheres.

Miscellaneous Items

Types of Discipline. The evidence produced indicates that Indian parents and pupils prefer Insightful to Emotional to Physical types of discipline, whereas teachers prefer Insightful to Physical to Emotional types.

Learning English. From the evidence it was concluded that Indian parents preferred Translating into the mother tongue to Rote Memorization to Thinking in English when learning the language. Pupils chose Translating into the mother tongue to Rote Memorization to Thinking in English.

Occupations. Two hypotheses were put forward in this item. The first, that the lowest number of occupations would be named by parents, the next lowest by pupils, and the highest by teachers, was supported. The second hypothesis, that the largest proportion of low and very low occupations would be named by parents, the next largest by pupils, and the smallest by teachers and administrators was supported. In fact, the proportions of High and Very Low occupations named by teachers and by parents were almost reversed.

Strong emotional resistance on the part of Indian parents and adolescent Indian pupils was noted in the administration of this item.

CHAPTER X

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

I. PROBLEM, THEORY, AND METHODOLOGY

The Problem

This study was designed to explore the value orientations of Indian parents, adolescent Indian pupils, and teachers and administrators in a northern Canadian school division, and to establish variations between and within the samples according to certain criterion variables.

Three smaller problems outside the theoretical framework of the major study were also investigated: the type of discipline preferred by each sample, preferences for differing methods in the learning of English, and occupational knowledge possessed by each of the samples.

For purposes of investigation, the major problem was divided into eight sub-problems and accompanying hypotheses. Sub-problems 1, 2, and 3 were concerned with the *dominant* value orientations of pupils, parents, and teachers. Hypothesis 1 predicted that the dominant value orientations of parents could be Collaterality, Present, Harmony-with-Nature, and Being. Hypothesis 2 predicted that the dominant orientations of pupils would be Collaterality, Present, Harmony-with-Nature, and Being. Hypothesis 3 predicted that the dominant orientations of teachers and administrators would be Individualism, Future, Mastery-over-Nature, and Doing.

Sub-problems 4 to 8 inclusive were concerned with establishing the variations in *total value orientation patterns* between and within groups. Hypothesis 4 predicted significant differences between value orientation patterns of Indian parents and adolescent Indian pupils. Hypothesis 5 predicted significant differences between patterns of parents and of teachers and administrators. Hypothesis 6 predicted significant differences between patterns of pupils and of teachers and administrators.

Sub-hypotheses 5.1, 6.1, 6.2, 6.3, and 6.4 predicted differences between value orientation patterns of the two samples of individuals of Indian ancestry and of teachers and administrators according to pupil age, years of residential school experience and sex, and years of teacher education possessed by teachers and administrators. Hypothesis 7 predicted no significant differences between patterns of Treaty and Non-Treaty Indian pupils. Hypotheses 8 predicted significant differences between patterns of teachers recruited in the United Kingdom in 1965 and all other teachers in Northland Division.

Theoretical Framework

The major part of the study was based on the theory of dominant and variant value orientations proposed by Florence Kluckhohn, who suggests that five "common human problems" exist in all societies at all times, and that the answers to these problems fall into limited, rank-ordered patterns termed "value orientations." The five problem areas identified in the theory are: Relational, Time, Man-Nature, Activity, and Human Nature. Three possible value orientation positions are postulated

within each of these areas. In the Relational area the positions are Lineality, Collaterality, Individualism. In the Time area, the positions are Past, Present, and Future. In the Man-Nature area the positions are Subject-to-Nature, Harmony-with-Nature, and Mastery-over-Nature. In the Activity area, the positions are Being, Being-in-Becoming, and Doing.

By means of the Kluckhohn method of eliciting value orientations, the first-, second-, and third-order preferences for each of the areas may be established for each sample.

The miscellaneous items concerning discipline and learning English were pragmatically-based. The occupations item followed the technique of French, who used the item in the Lesser Slave Lake area in 1960.

Instrumentation

Two basic instruments were created, based upon the original Kluckhohn instrument used in New Mexico in 1951. The Parent's Interview Schedule and Pupil's Questionnaire contained identical items, but differing instructions and identifying data sheets because of the differing methods of completion. The Teacher's and Administrator's Questionnaire contained items adapted to the vocabulary of a professional group, but tapping the same value orientation areas and behavior spheres as the items in the parent's and pupil's instrument. The miscellaneous item concerning learning English as a second language was omitted from the teacher's questionnaire.

Sample

The parent sample consisted of thirty individuals, fifteen male, fifteen female, drawn at random from the official school lists of parents in the Wabasca-Desmarais community of northern Alberta. The pupil sample consisted of 138 pupils aged twelve years and upwards, attending St. Theresa School, Wabasca, or Mistassiniy High School, Desmarais. The teacher-administrator sample consisted of 129 teachers and administrators out of a total of 152 on staff in all Northland School Division during the school year 1965/66.

A three-phase Pilot Study consisted of a sample of thirty-five students in educational administration at the University of Alberta, Edmonton, nine parents, and twenty-five Indian students at Calling Lake, Alberta, and seventy-five teachers in four elementary-junior high schools in Edmonton.

Data Collection

Data from the thirty parents were collected by the investigator through personal interview in the homes of the parents, assisted by a local interpreter who had recorded on tape a translation of the instrument into Cree. Data from the pupils were collected in group administration of the pupils' questionnaire by the investigator at St. Theresa School and Mistassiniy School. Teacher-administrator data were secured by the investigator at the time of the annual Teachers' Convention of Northland School Division in January, 1966, where the Teacher's and Administrator's Questionnaire was explained and distributed. Almost half the questionnaires were returned by mail over a period of nine weeks.

Statistical Treatment

Nonparametric statistical procedures were used throughout the study in view of the nature of the raw data, which are gathered in rank-ordered form. Three procedures were used: (1) calculation of Kendall's "S" to determine the existence of patterning in items, (2) binomial analysis against the normal curve for determination of homogeneity of patterning within items and within areas, and (3) use of Caudill's "distance" concept for the simultaneous comparison of one triple with another. A decision rule based on criteria of difference in type of pattern and difference in degree of homogeneity of response was arbitrarily adopted. The principle undergirding the decision rule was that a difference of twenty-five per cent in type of response in value orientation areas, or in homogeneity of response in individual items, can be considered evidence of a significant difference in pattern of value orientations. Chi-square values were computed through the use of contingency tables for similarly-ordered items in an attempt to demonstrate degree of association or independence of any two triples, but the evidence thus produced appeared inconclusive, and was reported only as a matter of interest.

In the Miscellaneous items, tests of statistical significance were not performed. Reporting was confined to statements of the rank-ordering of preferences in the "Types of Discipline" and "Learning English" items, and to raw frequencies and percentages in the responses to the "Occupations" item.

II. FINDINGS, CONCLUSIONS, AND IMPLICATIONS

Dominant Value Orientations of Parents, Pupils, and Teachers

The three hypotheses concerning dominant value orientations were made in order to test stereotypes commonly held about Indians and white men. The predictions concerning Indians were completely unsupported, thus providing evidence that the stereotype of the Indian is probably inaccurate. It was found that the dominant orientations of the Indian parents were Lineality, Future, Mastery-over-Nature, and Being-in-Becoming, not the hypothesized Collaterality, Present, Harmony-with-Nature, and Being. Dominant orientations of Indian pupils were found to be Lineality, Future, Subject-to-Nature, and Being-in-Becoming, rather than the hypothesized Collaterality, Present, Harmony-with-Nature, and Being. Pupils thus differed from their parents only in the Man-Nature area.

In the teacher and administrator sample it was found that non-Indian Canadians did in fact hold three out of the four predicted dominant value orientations--Individualism, Future, and Mastery-over-Nature. The fourth dominant orientation proved to be Being-in-Becoming rather than the predicted Doing.

In sum, nine out of twelve predictions in Hypotheses 1, 2, and 3 were unsupported by the findings. This was not surprising, in view of the directional nature of the hypotheses and the fact that they were based upon the testing of stereotypes rather than upon accurate documentation or sustained participant observation of the northern Alberta Cree. The lack of support for the hypotheses indicates a need for non-Indian Canadians to become better informed about Indian Canadians.

Variations in Total Value Orientation Patterns

Keeping in mind Kluckhohn's statement that, "in most of the analyses of the common value element in culture patterning, the dominant values of the people have been overstressed and the variant values largely ignored,"¹ the remaining hypotheses in this study were concerned with comparisons of dominant and variant orientations as *total value orientation patterns*.

Variations between parents and pupils. Constant debate proceeds among teachers of Indian pupils as to whether or not the pupils are moving away from their traditional cultural patterns. The testing of Hypothesis 4, predicting significant differences in patterns between parents and pupils, provided some information concerning possible shifts in values. It was found that significant differences did exist, but that evidence of a shift towards non-Indian values was weak at best. In the Relational area, parents and pupils chose Lineality over Collaterality over Individualism. In the Time area, parents and pupils chose Future over Present over Past. In the Activity area, both groups chose Being-in-Becoming over Doing over Being. In the Man-Nature area, however, parents chose Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature, while pupils chose Subject-to-Nature over Mastery-over-Nature over Harmony-with-Nature.

Examination of individual items indicates that pupils agreed with parents in sixteen items and disagreed with them in eight. The eight

¹Kluckhohn and Strodtbeck, *op. cit.*, p. 3.

dissimilar choices lay in three of the four areas. They were as follows: Relational--Choice of Delegate; Time--Child Training, Expectations About Change, Changes in Church Services, and Sudden Community Wealth; Man-Nature--Length of Life, Facing Conditions, and Hunting, Fishing, and Trapping. Clearly, whatever differences exist between parents and pupils lie almost entirely in the Time and Man-Nature areas. Differences leading to a dominant Subject-to-Nature orientation among the pupils may well be the result of the level of maturation of the children rather than a desertion of Indian cultural values. In the critical Relational area, pupils' choices were almost entirely congruent with those of their parents. It was concluded that this study provides little evidence of any basic shift in value orientations among the pupils away from their parents and towards the non-Indian culture, except in the Time area.

In discussing cultural transition, Kluckhohn suggests that:

. . . for total systems, the evidence of a virtually equal stress upon two alternative positions, especially in first-order choices, is usually indicative of cultural transition.²

Examination of the data of this study indicates that the homogeneity of preference of pupils was generally quite high, but that of parents was quite low. Pupils displayed ambivalence in first-order choices in one out of four value orientation areas, and in nine out of twenty-four items. Parents, by contrast, displayed ambivalence in three out of four areas and eighteen out of twenty-four items. If Kluckhohn's point of view can be accepted, it can only be concluded that Indian parents are

²*Ibid.*, p. 25.

undergoing greater cultural transition at the present time than are Indian pupils.

Variations between parents and teachers. In order to test the widely-held belief that adult Indians hold value orientations markedly divergent from those of white men, Hypothesis 5 predicted significant differences between the parent and teacher samples. It was found that such differences did, in fact, exist.

In the Relational area, emphasized by Kluckhohn as being a critical area in cultural transition, parents chose Lineality over Collaterality over Individualism, but teachers chose Individualism over Lineality over Collaterality. In the three remaining areas, parents and teachers agreed in their preferences. In the Time area, both chose Future over Present over Past. In the Man-Nature area, both chose Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature. In the Activity area, both chose Being-in-Becoming over Doing over Being.

Examination of the patterns in individual items indicated much greater lack of congruence than the above area findings might imply. Differences in pattern were found in three Relational items--Help in Misfortune, Wage Work, Family Work Relations; in four Time items--Ideas About Change, Philosophy of Life, Changes in Church Services, Sudden Community Wealth; in two Man-Nature items--Facing Conditions and Belief in Control; and in two Activity items--Job Choice and Women in the Modern World. It can be seen, then, that in eleven out of twenty-three items, Indian parents and teachers hold different value orientations.

If it is assumed that the Indian Canadian should adopt the value orientations of the white culture, such a demand is placing the Indian in a situation of extreme stress, according to Kluckhohn, who holds that:

First, it is hypothesized that when put under the dominating pressure of another culture which is not so excessive as to demand sudden change, the impinged-upon societies which have radically-different orientation orderings will shift first either their second and third-order value orientation preferences or their first and second-order ones. Second, we would predict that whenever the pressures are strong enough to prevent this "logical" type of shift and make fairly imperative demands for a shift from a strong first-order preference to a weak third-order one, there will be far more disorganization in the system, both socially and personally, than will occur in the slower, step-wise kind of change.³

In the same passage, Kluckhohn suggests that the most serious problems in adjustment in the subordinate culture will arise when too rapid a shift in the *relational* area is demanded, especially when the demand is being made to shift in other areas as well. Obviously this hypothetical situation fits the actual Indian situation in Alberta very well.

In addition to the rather large differences in the item patterns, it was observed that the discrepancy between the homogeneity of response of the parents and that of the teachers was very great. As noted in the discussion of pupil and parent differences, the responses of the parents were marked by great lack of homogeneity. By contrast, the responses of the teachers were very homogeneous.

It was concluded from the above findings concerning Indian parents and teachers that very important differences in value orientation patterns do exist, and that continued pressure upon the Indian people to change their

³*Ibid.*, p. 47.

patterns drastically will cause further social and personal disorganization of the Indian culture.

Variations between pupils and teachers. Discussion of the high proportion of dropouts in Indian schools often includes the hypothesis that a wide discrepancy exists between the value orientations of the teachers and those of the pupils, and that as the pupil matures he becomes acutely aware of the discrepancy and is threatened by it. Eventually he solves this problem by withdrawing from the threatening environment--the school. Hypothesis 6 tested the divergence in values between teachers and pupils by predicting significant differences between their value orientation patterns. The hypothesis received powerful support.

In the Relational area, pupils chose Lineality over Collaterality over Individualism, in contrast to the teachers' pattern of Individualism over Lineality over Collaterality. In the Man-Nature area, pupils chose Subject-to-Nature over Mastery-over-Nature over Harmony-with-Nature, in contrast to the teachers' pattern of Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature. In the Time area, both teachers and pupils chose Future over Present over Past, and in the Activity area both agreed upon Being-in-Becoming over Doing over Being. Clearly, pupils differ from their teachers to a greater degree than do their parents. The pupils stood alone in their preference for Subject-to-Nature as their dominant orientation in the Man-Nature area.

Examination of individual item differences disclosed that in the Relational area, pupils differed from teachers in items entitled Wage Work, Family Work Relations, and Help in Misfortune. In the Time area, differences

were found in the items Child Training and Philosophy of Life. In the Man-Nature area, differences were found in the items Length of Life, Belief in Control, and Hunting, Fishing, and Trapping. In the Activity area, differences were found in Job Choice and Women in the Modern World items. In almost half the items, then, pupils differed in their rank-ordering patterns from those of teachers.

It has been argued that evidence of the success of Indian schools should include a clear indication that the Indian pupils are adopting the values of the dominant white society. It was found in this study that pupils disagreed with parents in seven items, but agreed with teachers in only three of these, all of which lay in the Time area. It was concluded that whatever shifting of values may be occurring among the Indian pupils is not very pronounced, and lies in one of the less critical areas of cultural transition. If one of the objectives of education is the transmission of the values of the society in which individuals live, Indian schools have demonstrated a noteworthy lack of success in this endeavor. It seems clear that Indian parents are considerably more successful in enculturating their children in Indian ways than are the schools in acculturating the same children towards the dominant society.

In the crucial Relational value orientation area, for example, the pupil stands firmly with his parents in his first-order choice of Lineality, rejecting decisively the teacher's preference for Individualism. The value orientation pattern of the fourteen-year-old pupils was found to be interesting, however, since it was closer to that of the teachers than

the pattern of any other age-group. It was hypothesized that this finding could mean that the Indian pupil may be "trying out" white values around the age of fourteen, then rejecting them.

Variations between Treaty and Non-Treaty pupils. A commonly-held assumption is that paternalism of the Federal government towards Treaty Indians has modified traditional Indian values, probably for the worse. Debates arise as to whether or not this applies to the Non-Treaty or Metis Indians as well, since they lack the special rights of Treaty Indians. In order to test the presumed effect of Treaty rights upon value orientations, Hypothesis 7 predicted no significant differences in value orientation patterns would be found between Treaty and Non-Treaty sub-samples of pupils. The hypothesis was not supported.

It was found that in two of the four value orientation areas, differences in pattern type occurred between the groups. In the Relational area, Treaty pupils chose Lineality over Collaterality over Individualism, whereas Non-Treaty pupils chose Lineality over Individualism over Collaterality. In the Man-Nature area, Treaty pupils chose Being-in-Becoming over Doing over Being, whereas Non-Treaty pupils chose Doing over Being-in-Becoming over Being. In view of the weight attached by Kluckhohn to the Relational area, this is a finding of some considerable importance. Further, the placing of Individualism in a second-order position by the Non-Treaty pupils rather than in last place, the choice of the Treaty pupils, could be hypothesized to indicate a movement by the Non-Treaties out of the passivity which presumably results from paternalism. Such a movement would

require support from the Activity area, which was found in the Non-Treaty pupils placing Doing in a first-order position rather than in the second-order position chosen by the Treaty pupils.

Examination of individual items disclosed that Treaty pupils differed from Non-Treaty in three Relational items--Choice of Delegate, Help in Misfortune, and Dropping Out of School. The groups differed in three Time items--Ideas About Change, Changes in Church Services, and Sudden Community Wealth. The groups differed in one Man-Nature item--Facing Conditions, and in one Activity item--Women in the Modern World. In sum, inter-group differences in pattern type were found in eight out of twenty-four items.

Evidence of cultural transition was also found in the generally lower level of homogeneity of preference of the Non-Treaty pupils. In Relational, Time, and Man-Nature areas, Non-Treaty pupils were found to have approximately one-half the degree of homogeneity of preferences of Treaty Indians. For example, Treaty pupils were found to be ambivalent in first-order choices in only two items, whereas Non-Treaty pupils were ambivalent in eleven such item choices.

It was concluded that the value orientation pattern of Treaty pupils differs significantly from that of Non-Treaty pupils, and that there is considerable evidence from both area and item findings that the Non-Treaty pupils are in the midst of what Kluckhohn terms a "logical" shift in value orientations. The major trend is towards Individualism, supported by a greater preference for Doing rather than Being-in-Becoming.

The implications of this conclusion are rather far-reaching. It would appear that if it is part of the ideology of the dominant white culture to acculturate the Indian people, encouraging them to leave Treaty status would be one way of accomplishing this. The manner in which such encouragement could be given is not a matter for discussion in this report, but the strong Lineality orientation of the Indian people should be kept in mind at all times. As for the more immediate needs of the educators involved in programs for schools serving Indian children, the findings imply that change agents among Indian youth are more likely to be Non-Treaty than Treaty pupils. Counselling programs based on individualistic career choices, for example, should be directed towards Non-Treaty pupils in the first instance, if immediate results from scarce counselling services are required.

Variations between United Kingdom and other Northland teachers.

In explaining the Relational concept, Kluckhohn discusses the English in these words:

For example, in England, where there has been a definite Lineality in the aristocracy, there has also been an established pattern of moving successful members of the individualistically-oriented middle class into the peerage. By means of this and other related patterns, a fairly dominant Lineality has been maintained in the whole society until fairly recently.⁴

The presence in the Northland staff in 1966 of over forty teachers recruited in 1965 in the United Kingdom gave an opportunity to test Kluckhohn's statement. Hypothesis 8 predicted significant differences in value orienta-

⁴*Ibid.*, p. 19.

tion patterns of United Kingdom and other Northland teachers. The hypothesis was not supported by area findings, but many differences in item patterns emerged.

In three of the value orientation areas, both groups chose the same orderings. In the Relational area, the pattern found was Individualism over Lineality over Collaterality. In the Time area the pattern found was Future over Present over Past. In the Man-Nature area, the pattern found was Mastery-over-Nature over Harmony-with-Nature over Subject-to-Nature.

In the Activity area, United Kingdom teachers chose Being-in-Becoming over Being over Doing, in contrast to the other Northland teachers' choice of Being-in-Becoming over Doing over Being. This one second-order difference was not large enough to support the hypothesis of significant differences between groups. The hypothesis also failed to gain support under the criterion concerning homogeneity of response.

Examination of individual item patterns, however, provided some interesting differences in both pattern and homogeneity of response. Pattern variations were found in three Relational items--Help in Misfortune, Wage Work, and Family Work Relations; in one Time item--Allocation of Recreation Grant; in one Man-Nature item--Hunting, Fishing, and Trapping; and in four out of five Activity items--Job Choice, Ways of Living, Housework, and Non-Working Time. In sum, United Kingdom teachers differed in pattern type from other Northland teachers in nine out of twenty-three items.

In both areas and items, United Kingdom teachers were considerably less homogeneous in responses than were other teachers. In areas, United Kingdom teachers were ambivalent in two out of four first-order choices, whereas other teachers were ambivalent in none. In items, United Kingdom teachers were ambivalent in twelve out of twenty-three first-order choices, but other teachers were ambivalent in only six. Strict following of the Kluckhohn theory would force the conclusion that this sample of United Kingdom teachers is undergoing greater cultural transition than Indian parents, Indian pupils, Treaty Pupils, Non-Treaty pupils, and other teachers. The very nature of the highly-selected sample of people willing to emigrate to a harsh setting lends support to the conclusion. Another possible explanation of the finding is that the United Kingdom teachers are *not* in cultural transition, but are drawn from diverse social groups, with consequent diversity of value orientation.

The finding supported Kluckhohn's position that the English have a dominant preference for Individualism, with Lineality as second choice. In general, it was concluded that there is no evidence from this study that teachers from the United Kingdom should not be able to adapt to the setting and the staff of Indian schools in Northern Alberta, but that pre-service orientation to Canadian values would probably be useful.

Variations within the parent, pupil, and teacher samples. Considerable discussion has been noted in Indian education circles concerning the most appropriate length of teacher education for teachers in Indian schools. Some have held that too much teacher preparation leads to

ineffectual performance by the teacher due to the fact that his values diverge from those of the pupils to a greater degree than the values of a less well-prepared teacher. Sub-hypothesis 5.1 tested the relationship between years of teacher education and incongruence of teacher and parent values. Sub-hypothesis 6.4 tested the same relationship with teacher and pupil values.

It was found that the greater the number of years of teacher education possessed by the teacher, the greater the dissimilarity of the teacher's value orientation pattern to that of parents. When teachers were compared with pupils on the same criterion, no clear relationship was found. It was concluded that the relationship between length of teacher preparation and suitability for teaching in Indian schools is not clearly established. It could be hypothesized that the *type* of teacher preparation is more important than the *length* of preparation.

This study also investigated, by testing sub-hypotheses 6.1 and 6.2, the relationship between length of contact of the Indian pupil with teachers and congruence of value orientations. It was found that, to a limited extent, the older the adolescent Indian pupil, the greater the similarity of his pattern of value orientations to that of teachers. A similar finding emerged when years of residential school experience were related to congruence of value orientation patterns. To a limited extent, the greater the number of years of residential school experience of the Indian pupil, the greater the similarity of his value orientation pattern to that of teachers.

It was concluded that length of contact between Indian pupil and

teacher because of age or residential school experience, or both, was not a satisfactory predictor of increasing congruence of value orientation patterns..

This study also investigated the relationship between sex and similarity of value orientation patterns. Sub-hypothesis 6.3 predicted that the value orientation pattern of female Indian pupils would differ more from that of teachers than would the pattern of male Indian pupils. The hypothesis was supported. The finding lends further support to the familiar belief that women usually adapt to a new environment more slowly than men.

Variations by Cultural Groupings

A persistent underlying question in this study is whether or not Indian parents and pupils group their patterns of value orientations in opposition to the teachers. By grouping the parent and pupil responses and comparing them with responses of teachers it was found that both Indian and non-Indian groups agreed in rank-ordering of preferences in ten out of twenty-three items. In the thirteen items in which the Indian and non-Indian samples did not agree, the Indian grouping agreed within its members on five items. Pupils disagreed with parents and agreed with teachers on two *other* items. In three items pupils stood alone, agreeing neither with teachers nor parents.

It was concluded that in general the preferences of the Indian cultural group did tend to cluster in opposition to non-Indian preferences in a majority of the items. Nevertheless, considerable evidence was found of congruence of patterns, and also of the ability of both parents and

pupils to disagree with their own cultural group and agree with non-Indian preferences. Finally, the independence of the pupils from both parents and teachers in three items is interesting.

The implication of the findings concerning Indian-non-Indian clustering of values is that a fairly solid base exists for continued discussions between Indian and non-Indian citizens in Canada, but that a realistic approach to problem-solving demands recognition of the very real differences between cultures in certain behavior spheres.

Miscellaneous Items

In the item Types of Discipline, it was found that parents preferred Insightful over Emotional over Physical discipline. Pupils chose Insightful over Emotional over Physical, like their parents. Teachers chose Insightful over Physical over Emotional. Some evidence pointed to the fact that all respondents may not have been answering the question from the same point of view, but the agreement on the dominant value of Insightful discipline is worthy of note.

In the Learning English item, it was found that parents were completely ambivalent between Translating into Cree and Rote Memorization, with Thinking in English being the last choice. Pupils showed a clear preference for Translating into Cree over Rote Memorization over Thinking in English. Although the first-order choice is perhaps not the most efficient way of learning a second language, it is preferred to Rote Memorization, which the parents equated with Translating into Cree.

In the Occupations item, parents named the lowest mean number of

occupations and the lowest proportion of High Occupations, as determined by groupings of Blishen scale divisions. Pupils named the next highest mean number of occupations, and the proportion of High occupations named was almost three times that of the parents. Teachers named the highest mean number of occupations, almost five times the mean number named by parents, and also the highest proportion of High occupations. It was concluded that the knowledge of the occupational world possessed by both parents and pupils is quite limited, and that the occupational models of these samples tend to cluster in occupations categorized as Very Low.

III. CONCLUDING OBSERVATIONS

The findings of this study lead to a number of observations and recommendations in addition to those already mentioned in the preceding section.

Kluckhohn Theory and Method

Use of the Kluckhohn theory and method for the cross-cultural investigation of value orientations was found to be productive of data from which between-group and within-group comparisons can reasonably be made. The instrument needs refining and simplifying. New items tapping a wider spectrum of behavior spheres need to be created. Judging from the lack of homogeneity of the sample of pupils aged twelve years, together with the sharp rise in overall homogeneity of responses for the thirteen-year-old sample, the minimum age for which the method appears valid may be tentatively stated to be thirteen years. The method appears sound for intra-cultural comparisons (in spite of Kluckhohn's caution that it may

not be so) but probably only with larger samples.

Appropriateness of the probability values associated with the use of Kendall's "S" and of binomial analysis against the normal curve should be investigated, in view of the extremely wide range of quantities obtained by these statistical techniques. A sampling distribution of value orientation triples of the type elicited by the Kluckhohn method is badly needed, since the inconclusive nature of the χ^2 tests of association may indicate the possibility of a unique distribution.

Examination of the individual scores of respondents on the choice of preference pairs gives a hint that these scores may be a type of diagnostic clue to personality disturbance. The two most overtly eccentric respondents displayed preference pair scores most deviant from the mode of the thirty parents.

Program Development for Indian Schools

Efforts by the school to develop individualism among pupils of Indian ancestry should be recognized as being in opposition to the strong Lineality value orientation of the Indian culture, with the possible danger that such efforts may produce alienation from school. Insistence upon discontinuity with parental life styles may produce deep inner conflicts within the pupil which he himself may only dimly realize. Counselling students to adopt vocational plans which may take them away from home could produce only lip-service co-operation. When the time comes to leave home the pupil may refuse to do so, unless he has some assurance in advance that he will find a substitute "outside" for the familial support

which he needs desperately, and probably has found in the Indian community.

Curriculum workers and teachers should recognize that the Indian culture in northern Alberta is strongly motivated toward self-development and towards productive activities. Continuing or adult education programs are indicated, using the school as the base of operations. The older generation should not be disregarded, but should find in the school the opportunity for self-improvement which Indian parents crave. Planning for continuing education programs should be done in co-operation with Indian citizens, with due regard for the value orientations disclosed by this study, especially in the Relational value orientation area.

Special attention should be paid to curriculum as Indian pupils approach and pass through the age of fourteen years, a time in which they may be "trying out" non-Indian value orientations to a limited extent. The relationship of this trend to the approaching end of compulsory school attendance age should also be explored.

Teacher Education

The likelihood of Alberta teachers meeting Indian children in the classrooms of provincially-supported schools increases in proportion to the extension of educational services to Indian communities, particularly in settings where integrated schooling is carried out. It would seem appropriate to include in all teacher education programs some information about the effects of culture upon learning, and some authentic information

about the educational problems of Alberta Indians. Further, in-service education programs in certain regions of the province where a local Indian population exists could well focus, from time to time, upon cultural problems.

Further Research

A replication of the present study is urgently needed, using non-Indian samples of urban and rural pupils aged thirteen and upwards. Findings from such samples could help to clarify the "Subject-to-Nature" orientation found among the Indian pupils, in contrast to that of their parents. Findings from non-Indian samples could also assist curriculum workers to adjust school programs at various levels in order to balance the cultural perspective of both Indian and non-Indian pupils. This could help to reduce the gross misconceptions both groups have of each other's culture.

The highly general findings of this study could profitably lead to more specific studies of the attitudes of both Indian and non-Indian citizens with regard to social irritants such as discriminatory legislation, special privileges, and the dominant society's mounting demands for productivity from the Indian population. Although the study has demonstrated some marked differences between the value orientations of Indian and non-Indian, it has also revealed considerable areas of agreement between the two groups, and thus the possibility of eventual success in solving the pressing problems now facing the Indian population of Canada.

BIBLIOGRAPHY

A. BOOKS

- Anderson, Kenneth E., E. Gordon Colister, and Carl E. Ladd. *The Educational Achievement of Indian Children*. Washington: Bureau of Indian Affairs, Department of the Interior, 1953.
- Beatty, Willard W. (ed.). *Education for Cultural Change*. Washington: U.S. Department of the Interior, Bureau of Indian Affairs, 1953.
- Bloom, Benjamin S., Allison Davis, and Robert Hess. *Compensatory Education for Cultural Deprivation*. New York: Holt, Rinehart and Winston, Inc., 1965.
- Buffalo Child Long Lance. *Redman Echoes*. Los Angeles: Frank Wiggins Trade School, 1933.
- Eels, Kenneth. *Intelligence and Cultural Differences*. Chicago: University of Chicago Press, 1951.
- Gross, Neal, Ward Mason, and Alexander W. McEachern. *Explorations in Role Analysis*. New York: John Wiley and Sons, Inc., 1958.
- Havighurst, Robert J., and Bernice L. Neugarten. *American Indian and White Children*. Chicago: University of Chicago Press, 1955.
- Hawthorn, H. B., C. S. Belshaw, and S. M. Jamieson. *The Indians of British Columbia*. Toronto: The University of Toronto Press and the University of British Columbia, 1960.
- Hearn, Gordon. *Theory Building in Social Work*. Toronto: University of Toronto Press, 1958.
- Kendall, Maurice G. *Rank Correlation Methods, 3rd Edition*. New York: Hafner Publishing Company, 1962.
- Kluckhohn, Florence Rockwood, and Fred L. Strodbeck. *Variations in Value Orientations*. Evanston: Row, Peterson and Company, 1961.
- Krathwol, David R., Benjamin S. Bloom, and Bertram B. Masia. *Taxonomy of Educational Objectives Handbook II: Affective Domain*. New York: David McKay Company, Inc., 1964.
- LaFlesche, Francis. *The Middle Five*. Madison, Wis.: The University of Wisconsin Press, 1963.
- Lee, Dorothy. *Freedom and Culture*. [n.p.]: Prentice-Hall, Inc., 1959.

- Lepley, Ray. *The Language of Value*. New York: Columbia University Press, 1957.
- Montagu, Ashley. *The Idea of Race*. Lincoln, Nebr.: University of Nebraska Press, 1965.
- Morris, Alexander. *The Treaties of Canada with the Indians of Manitoba and the North-West Territories*. Toronto: Willing and Williamson, 1880.
- Morris, Charles. *Signification and Significance*. Cambridge, Mass.: The M.I.T. Press, Massachusetts Institute of Technology, 1964.
- _____. *Varieties of Human Value*. Chicago: University of Chicago Press, 1956.
- Newcomb, T. M., Ralph H. Turner, and Philip E. Converse. *Social Psychology*. New York: Holt, Rinehart and Winston, Inc., 1965.
- Parsons, Talcott, and Edward A. Shils, (editors). *Toward a General Theory of Action*. New York: Harper & Row, 1951.
- Pepper, Stephen C. *The Sources of Values*. Berkeley: University of California Press, 1958.
- Ray, Charles K. *A Program of Education for Alaskan Natives*. College: University of Alaska, 1959.
- _____, Joan Ryan, and Seymour Parker. *Alaskan Native Secondary School Dropouts*. College, Alaska: University of Alaska, 1962.
- Riesman, David, Nathan Glazer, and Reuel Denney. *The Lonely Crowd*. Garden City, N.Y.: Doubleday and Company, 1953.
- Spicer, Edward H. (ed.). *Perspectives in American Indian Culture Change*. Chicago: University of Chicago Press, 1961.
- Spindler, George D. *Education and Culture*. New York: Holt, Rinehart and Winston, 1963.
- Vandersteene, Roger. *Wabasca*. Gemmenich, Belgium: Editions O.M.I., 1960.
- Whyte, William H., Jr. *The Organization Man*. New York: Simon and Schuster, 1956.
- Wright, George Henrik von. *The Logic of Preference*. Edinburgh: Edinburgh University Press, 1963.

B. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES,
AND OTHER ORGANIZATIONS

Buckley, Helen, J. E. M. Kew, and John B. Hawley. *The Indians and Metis of Northern Saskatchewan*. Saskatoon: Centre for Community Studies, 1963.

Canadian Association of School Superintendents and Inspectors. *The Education of Indian Children in Canada*. Toronto: The Ryerson Press, 1965.

Canadian School Trustees' Association. *A Brief to the Royal Commission on Taxation*. [n.p.]: Canadian School Trustees' Association, 1963.

Card, B. Y., G. K. Hirabayashi, and Cecil L. French. *The Metis in Alberta Society*. Edmonton: University of Alberta Committee for Social Research, 1963.

Department of Citizenship and Immigration, Indian Affairs Branch. "Indian Education," *The Indian in Transition*. Ottawa: Queen's Printer, 1964.

_____. *Indians of the Prairie Provinces. (An Historical Review)*. Ottawa: Indian Affairs Branch, 1964.

_____. *Traditional Linguistic and Cultural Affiliations of Canadian Indian Bands*. Ottawa: Indian Affairs Branch, 1964.

Department of Justice, Canada. *The British North America Acts 1867 to 1960*. Ottawa: Queen's Printer, 1964.

Hallowell, A. Irving. "Ojibway Personality and Acculturation," *Acculturation in the Americas*, pp. 105-12. Proceedings and Selected Papers of the XXIXth International Congress of Americanists, Sol Tax, editor. Chicago: University of Chicago Press, 1952.

Jacob, Philip E., James J. Flink, and Hedvah L. Schuchman. "Values and their Function in Decision-Making," *University of Pennsylvania Studies of Social Values and Public Policy*. Philadelphia: University of Pennsylvania, 1962.

Lagasse, Jean H. *A Study of the Population of Indian Ancestry Living in Manitoba*. Winnipeg: The Department of Agriculture and Immigration, 1959.

MacArthur, R. S. "The Intellectual Ability of Metis Pupils at Faust, Alberta," *The Metis in Alberta Society*, pp. 305-310. University of Alberta Committee for Social Research. Edmonton: The University of Alberta, 1963.

- Orata, Pedro T. *Fundamental Education in an Amerindian Community*. Washington: Department of the Interior, Bureau of Indian Affairs, 1953.
- Peterson, Shailer. *How Well Are Indian Children Educated?* Washington: Department of the Interior, United States Indian Service, 1948.
- Ruesch, Jurgen. "Values and the Process of Communication," *Symposium on Preventive and Social Psychiatry*. Washington: Walter Reed Army Institute of Research, 1957. Pp. 27-41.
- Underhill, Ruth M. "Culture Has Nothing to do with Blood," *Education for Cultural Change*. Willard W. Beatty and associates, editors. Washington: U.S. Department of the Interior, Bureau of Indian Affairs, 1953.

C. PERIODICALS

- Caudill, William, and Harry A. Scarr. "Japanese Value Orientations and Culture Change," *Ethnology*, I (1962), 53-91.
- Chalmers, John West. "A New Deal in Indian Education," *Quest*, II (September, 1964), 5-7.
- _____. "New Schools in the Forest," *The Beaver*, Outfit 295 (Spring, 1964), 44-50.
- Decore, Anne Marie. "Demographic Characteristics of Canadian Indians," *Variables*, V (Spring, 1966), 15-20.
- Friedenberg, Edgar Z. "An Ideology of School Withdrawal," *Commentary*, XXXV (June, 1962), 492-500.
- Hallowell, A. Irving. "American Indians, White and Black: The Phenomenon of Transculturalization," *Current Anthropology*, IV (December, 1963), 519-31.
- Henry, Jules, and Joan W. Boggs. "Child Rearing, Culture and the Natural World," *Psychiatry* XV (1952), 261-71, cited by Clyde Kluckhohn, "Culture and Behavior," *Handbook of Social Psychology*, Gardner Lindzey, editor. Cambridge, Mass.: Addison-Wesley Publishing Company, Inc., 1954. Pp. 921-76.
- Honigmann, John J. "Interpersonal Relations and Ideology in a Northern Canadian Community," *Social Forces*, XXV (May, 1957), 365-70.

- Hoyt, Elizabeth D. "An Approach to the Mind of the Young Indian," *Journal of American Indian Education*, I (June, 1961), 17-23.
- Kluckhohn, Florence Rockwood, "A Method for Eliciting Value Orientations," *Anthropological Linguistics*, II (February, 1960), 1-23.
- _____. "Dominant and Substitute Profiles of Cultural Orientation: Their Significance for the Analysis of Social Stratification," *Social Forces*, XXVIII (May, 1950), 376-93.
- Lloyd, David O. "Comparison of Standardized Test Results of Indian and Non-Indian in an Integrated School System," *Journal of American Indian Education*, I (June, 1961), 25-31.
- MacNeish, June Halm. "Problems of Acculturation and Livelihood in a Northern Indian Band," *Contributions à l'Etude des Sciences de l'Homme*, III (1956), 169-82.
- Parsons, Talcott. "The School Class as a Social System: Some of its Functions in American Society," *Harvard Educational Review*, XXIX (Fall, 1959), 297-318.
- Renaud, André M. "Communautés Ethniques et Collectivités Indiennes au Canada," *Recherches Sociographiques*, IV (Janvier-Avril, 1963), 91-105.
- Wax, Murray L., Rosalie H. Wax, and Robert V. Dumont, Jr. "Formal Education in an American Indian Community," *Social Problems*, XI (Spring, 1964), 1-126.
- Zentner, Henry. "Parental Behavior and Student Attitudes Towards Further Training Among Indian and Non-Indian Students in Oregon and Alberta," *The Alberta Journal of Educational Research*, IX (March, 1963), 22-30.

D. ESSAYS AND ARTICLES IN COLLECTION

- Holmes, Brian. "Organization of Teacher Training," *Yearbook of Education*, 1963. London: Evans Brothers Limited, 1963. Pp. 119-36.
- Kluckhohn, Clyde. "Values and Value Orientations in the Theory of Action: An Exploration in Definition and Classification," *Toward a General Theory of Action*, Talcott Parsons and Edward A. Shils, editors. New York: Harper and Row, 1951. Pp. 388-433.
- Kluckhohn, Florence Rockwood. "Dominant and Variant Value Orientations," *Personality in Nature, Society and Culture*, Clyde Kluckhohn and Henry A. Murray, editors. New York: Alfred A. Knopf, 1956. Pp. 342-57.
- _____. "Value Orientations," *Toward A Unified Theory of Human Behavior*, Roy R. Grinker, editor. [n.p.]: Basic Books, Inc., 1956. Pp. 83-93.

- Lee, Dorothy. "Are Basic Needs Ultimate?" *Personality in Nature, Society and Culture*, Clyde Kluckhohn and Henry A. Murray, editors. New York: Alfred A. Knopf, 1956. Pp. 335-341.
- Mead, Margaret, "Our Educational Emphases in Primitive Perspective," *Education and Culture*, George D. Spindler, editor. New York: Holt, Rinehart and Winston, 1963. Pp. 309-20.
- Murray, Henry A. "Toward a Classification of Interactions," *Toward a General Theory of Action*. Talcott Parsons and Edward A. Shils, editors. New York: Harper & Row, 1951. Pp. 434-464.
- Spindler, George D., and Louise Spindler. "Researching the Perception of Cultural Alternatives: The Instrumental Activities Inventory," *Context and Meaning in Cultural Anthropology*, Melford E. Spiro, editor. New York: The Free Press, 1965. Pp. 312-337.

E. UNPUBLISHED MATERIALS

- Gooderham, G. Kent. "Present Curriculum Programs for Pupils of Indian Ancestry." Report of the First Interprovincial Conference on Schools in the Forest, pp. 24-29. Edmonton: Northland School Division #61, 1963. (Mimeographed.)
- Kitchen, Hubert William. "Relationships Between the Value Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups." Unpublished doctoral thesis, The University of Alberta, Edmonton, 1966.
- Knill, William D., and Arthur K. Davis. "Provincial Education in Northern Saskatchewan." [n.p.]: W. D. Knill and A. K. Davis, 1963.
- Pothier, Roger, and Norman A. Chance. "Etude des Orientations de Valeurs parmi les Indiens Mistassini du Quebec." Montreal: McGill-Cree Project, McGill University, 1966. (Mimeographed.)
- Seeger, John E. "Variations in Value Orientations and Differences in Role Expectations - a Relationship Within an Educational Context." Unpublished doctoral thesis, University of Oregon, Eugene, 1965.
- Strong, Mary Symons. "Social Class and Levels of Aspiration Among Selected Alberta High School Students." Unpublished Master's Thesis, The University of Alberta, Edmonton, 1963.

F. NEWSPAPERS

- "Up From Hiawatha," *Time*, January 7, 1966, p. 14.

Lee, Dorothy. "Are Basic Needs Universal?" *Anthropology in Action*, 1965, 13: 1-11.

Neale, Margaret. "Our Educational Program in Primitive Perspectives." *Anthropology and Education*, George D. Spindler, editor. New York: Holt, Rinehart and Winston, 1967. pp. 200-20.

Murphy, Henry A. "Toward a Classification of Interests." *Journal of Educational Research*, 1961, 54: 434-444.

Spindler, George D., and Louise Spindler. "Researching the Psychology of Cultural Differences: The Institutional Activities Inventory." *Journal of Educational Research*, 1961, 54: 434-444.

E. UNPUBLISHED MATERIALS

Goodman, G. Kent. "Present Curriculum Programs for Pupils of Indian Ancestry." Report of the first interprovincial conference on schools in the forest, pp. 24-29. Edmonton: Northwest School Division 401, 1963. (Micrographed.)

Kitchen, Hubert William. "Relationships between the Value Orientation of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups." Unpublished doctoral thesis, the University of Alberta, Edmonton, 1966.

Knill, William D., and Arthur K. Davis. "Provincial Education in Northern Saskatchewan." [p.p.]: W. D. Knill and A. K. Davis, 1963.

Bohier, Roger, and Norman A. Chance. "Ethnic and Orientation in the Forest." *Journal of Educational Research*, 1965, 68: 1-11. (Micrographed.)

Sager, John H. "Variations in Value Orientation and Attitudes in the Forest: A Relationship with an Educational Context." Unpublished doctoral thesis, University of Oregon, Eugene, 1965.

Strong, Mary Symons. "Social Class and Level of Aspiration among Pupils of Alberta High School Students." Unpublished Master's thesis, the University of Alberta, Edmonton, 1963.

F. REFERENCES

"Up from Slavery." *Time*, January 7, 1966, p. 14.

APPENDICES

APPENDIX A

PARENT'S INTERVIEW SCHEDULE

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
UNIVERSITY OF ALBERTA

Northern Schools Study

XX		XX
XX		XX
XXXXXX		XXXXXX
XX		XX
XX		XX
XX		XX
XX		XX
XX		XX
XX	PARENT'S INTERVIEW SCHEDULE	XX
XX		XX
XX		XX
XX		XX
XX		XX
XX		XX
XXXXXX		XXXXXX
XX		XX
XX		XX

February 1966

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

UNIVERSITY OF ALBERTA

Northern Schools Study

PARENT'S INTERVIEW SCHEDULE¹

Almost all the questions in this questionnaire tell a story with three people in it, or tell about a problem with three possible answers, A, B, or C. There are no right or wrong answers. The questionnaire only asks for your preferences or likes.

After each question has been read to you, please tell the interviewer which one of the possible answers you like best, which one you like second best, and which one you like third best. The interviewer will mark 1, 2, and 3 beside the answers that you name first, second, and third best. If two or even three answers seem just as good as one another, please tell the interviewer this, and he will give each of these answers the same number.

Most of the questions will be like the one on the next page.

¹The first two pages of this schedule are reproduced with the original wide spacing which was part of the research design. The remainder of the instrument has been condensed to save space.

EXAMPLE OF QUESTIONS

1. Colors

Three people were discussing the use of light and dark colors. Each had a different idea.

3 A One person said, "I like black. It is a solid color, and good contrasts are possible."

1 B A second person said, "I like gray. It goes with anything, and it is a soft color."

2 C A third person said, "I like white. You can do so many things with it, and use it anywhere."

Since you prefer light colors, you decide you agree most with B, so you write 1 opposite the letter B. You like white second best, so you write 2 opposite the letter C. You like black third best, so you write 3 opposite the letter A.

There are no right or wrong answers, just preferences or likes. Some of the questions will seem hard, but read them carefully, then mark your 1, 2, and 3.

PLEASE DO NOT LEAVE OUT ANY QUESTIONS

1. Choice of Representative

A settlement like yours has to send a person to speak for them at a meeting in a town a long way off. There are three ways to choose who to send.

Should a meeting be called, and everyone talk things
 ___ A over until almost everyone agrees, so that when a vote is taken, almost everyone would agree on the same person?

Should the older, more important leaders who have
 ___ B long experience with such things take the main responsibility for deciding who should be sent?

Should a meeting be called, names be put up, a vote
 ___ C be taken, and the person sent who gets the majority of the votes, even though many people are still against sending that person?

2. Length of Life

Three persons were talking about whether people themselves can do anything to make the lives of men and women longer.

One person said, "It is already true that doctors and
 ___ A others are finding ways to add many years to the lives of most people, through new medicines, vaccinations, and the study of foods. If people will pay attention to all these new things, they will almost always live longer."

A second person said, "I really do not believe there
 ___ B is much that human beings can do to make the lives of men and women longer. I believe that every person has a set time to die, and when that time comes, it just comes."

A third person said, "I believe that there is a plan to
 ___ C life which works to keep all living things moving together, and if a man will learn to live his whole life by that plan, he will live longer than other men."

3. Child Training

Some people were talking about how children should be brought up. Here are three different ideas.

Some people said that children should always be taught well the ways of the old people. These people believe that the old ways are the best, and that when children do not follow the old ways, things go wrong.

— A

Some people said that children should be taught some of the ways of the old people, but that it is wrong to make children stick to these ways. These people believe that it is necessary for children always to learn about and take on those new ways that will best help them get along in the world of today.

— B

Some people did not believe that children should be taught much about the ways of the old people, except as an interesting story of what has gone before. These people believe that the world goes along best when children are taught the things that will help them find out new ways of doing things instead of following old ways.

— C

4. Job Choice

A man needed a job and had a chance to work for three men. The three bosses were different. Listen to what they were like and say which you think would be the best to work for.

One boss was a fair enough man who gave a little higher pay than most men, but he was the kind of boss who made men work hard and stay on the job. He did not like it at all when a worker left work for awhile to go on a trip or have a day or so of fun, and he thought it was right not to take such a worker back on the job.

— A

A second boss paid just ordinary wages, but he was not so strict. He understood that a worker sometimes would not turn up - would be off on a trip or having a little fun for a day or so. When his men did this, he would complain a little, but the men would go back to work.

— B

A third boss paid just ordinary wages. He was firm, but he understood that a worker would sometimes not turn up - would be off on a trip or having a little fun for a day or so. But when a worker came back, this boss would always ask him how he expected to become a better worker by taking so much time off. The boss would take the man back on the job if the man could show that he wanted to learn more and become a better man.

— C

5. Ideas About Change

Three young people were talking about what they thought they would have after they left school and started raising a family, compared with what their fathers and mothers have.

_____ A The first one said, "I expect my family will be better off in the future than the family of my father and mother or relatives, if we work hard and plan right. Things in this country usually get better for people who really try. "

_____ B The second one said, "I don't know whether my family will be better off, the same, or worse off than the family of my father and mother or relatives. Things always go up and down even if people do work hard. So one can never really tell how things will be. "

_____ C The third one said, "I expect my family to be about the same as the family of my father and mother or relatives. The best way is to work hard and plan ways to keep up things as they have been in the past. "

6. Facing Conditions

There are different ways of thinking about how God is related to man and to weather and to all other natural conditions which make plants and animals live or die. Here are three possible ways.

_____ A God and people all work together all the time; whether the conditions which make the plants and animals grow are good or bad depends upon whether people do all the proper things to keep themselves working along with their God and with the forces of nature.

_____ B God does not directly use his power to control the conditions which affect the growth of plants or animals. It is up to people themselves to find out how and why conditions change, and try hard to find the ways of controlling them.

_____ C Man cannot know how God uses his power over the conditions which affect the growth of plants and animals, and it is useless for people to think they can change conditions very much for very long. The best way is to take conditions as they come and do as well as one can.

7. Help in Misfortune

Suppose a man had some very bad luck. Say his cabin burned down, or he had to give up trapping or working for awhile because his wife was sick. He and his family had to have help from someone if they were to get through the winter. Here are three different ways of getting help.

_____ A It would be best if he depended mostly on his brothers and sisters or close friends to help him out as much as possible.

_____ B It would be best for him to try to raise the money on his own, from people who are neither relatives nor employers.

_____ C It would be best for him to go to his employer, or to an older, important relative (like his father, grandfather, or uncle) who is used to managing things in the settlement, and ask him to help out until things get better.

8. Ways of Living

Three people were talking about how they liked to live. Each one had a different idea.

_____ A One said, "What I care about most is accomplishing things - getting things done just as well or better than other people do them. I like to see results and think that they are worth working for."

_____ B The second person said, "What I care about most is to be allowed to think and act in the manner that best suits the way I really am. Even if I don't get much done, I believe in enjoying life as I go along."

_____ C The third person said, "What I care about most is learning and developing as a person. I like to be active and busy, but it is more important to me to feel that I am becoming a better person than to have a lot to show."

9. Belief in Control

Three men from different areas were talking about the things that control the weather and other conditions.

One man said, "My people have never controlled the rain, wind, and other natural conditions, and probably never will. There have always been good years and bad years. That is the way it is, and if you are wise you will take it as it comes and do the best you can."

The second man said, "My people believe that it is man's job to find ways to overcome weather and other conditions, just as they have overcome so many things. They believe they will one day succeed in doing this, and may even overcome dry years and floods."

The third man said, "My people keep things going by working with all the forces which make the rain, the snow, and other conditions. It is when we do the correct things, live in the proper way, and keep all that we have in good condition, that all goes well."

10. Ideas About Life

People often have very different ideas about what has gone before and what we can expect in life. Here are three ways of thinking about these things.

Some people believe that it is best to give the most attention to what is happening now in the present. The past is gone, they say, and the future is too uncertain to count upon. Although things change, sometimes for the better, sometimes for the worse, in the long run life is about the same. People who believe this way think it is all right to keep whatever old ways one likes, but at the same time be ready to accept new ways as they come from year to year.

Some people think that the old ways were the best, and that as changes come, things get worse. These people think the best way to live is to work hard to keep up the old ways, and try to bring them back when they are lost.

Some people believe that the ways of the future will be the best, and even though change brings some small setbacks, it brings improvement in the long run. People who believe this think the best way to live is to look a long time ahead, work hard, and give up many things now so that the future will be better.

11. Deciding How to Use Government Help

The government one time had quite a lot of money to give to settlements like yours for the people to make or build something in the settlement for spare-time activities. Different people in the settlements had different ideas about how to make the plan to use the money.

—A One person said, "The older, important leaders in the settlement should decide how to use the money. They have experience in such things and can tell the government what they think we need. "

—B A second person said, "We should call a community meeting and ask everyone to come with his own ideas. Every idea should be voted on, and the plan that gets the largest number of votes will be the plan we tell the government, even if many people still object to that plan. "

—C A third person said, "We should call a community meeting and talk about what we want until everyone pretty well agrees on a plan. That will be the plan we send to the government. "

12. Use of Traplines

Three different men each had a trapline, and each had his own way of running his trapline.

—A One man set out his traps, worked hard, and also set himself to living in right and proper ways. He felt that it is the man who keeps himself working along with nature who makes the best of things and gets the most fur.

—B Another man set out his traps, but only worked hard enough on the trapline to keep it going. He felt that it mainly depended on the weather how much fur he got, and that nothing extra that people do could change things much.

—C A third man set out his traps and worked hard on his trapline. He made use of all the new ideas he could find to be a better trapper. He felt that by doing this he would get more fur in most years.

13. Housework

Three women were talking about the way they liked to live.

One said that she was willing to work as hard as most women, but that she didn't like to spend a lot of time doing extra things in her house or taking up extra things outside. Instead she liked to have time free to enjoy visiting people, going on trips, or just talking with whomever was around.

The second woman said that she liked best of all to find extra things to work on which would interest her, such as improving her home, joining a club, or doing some extra sewing. She said she was happiest when she was kept busy and getting lots done.

The third woman said that she liked to be active at things that would teach her how to understand herself and life better. She didn't worry about getting much done, as long as she felt she was developing within herself.

14. Wage Work

Three men were talking about three different ways of working. Each man had a different idea.

One said, "I like being my own boss, and doing things my way. Then I can decide what to do, start when I like and stop when I like, and work as hard or as long as I like."

The second man said, "I like to work for a big company where I get paid regular wages and where I have a general idea of how many hours a day I will work, and what will be expected of me."

A third man said, "I like to work with a friend or several friends. We would work together as equal partners and decide what to do among ourselves."

15. Family Work Relations

Three people from different settlements were talking about how families who live close together in the settlement can arrange their work. Here are three possible ways.

In one settlement, each of the separate families (that is, husband, wife, and children) looks after its own business separately from all the others, and is not responsible for the others.

___B In the second settlement, the close relatives in the families work together and talk over among themselves the way to take care of whatever problems come up.

___C In the third settlement the families that are closely related work together but have the oldest able person be responsible for the most important things and take charge of these things.

16. Non-working Time

Three men spend their time in different ways when they have no work to do.

___A One man spends most of his time learning or trying out things which will help him in his work.

___B One man spends his time learning new things which make him feel he is developing himself and learning to understand himself better. As long as he is learning to be a more complete and better person, he is happy.

___C One man spends most of his time talking, telling stories, singing, and so on, with his friends.

17. Changes in Church Services

People in a settlement like yours saw that the church services were changing from what they used to be.

___A Some people were really pleased because of the changes in the church services. They felt that new ways are usually better than old ones, and they like to keep everything - even church services - moving ahead.

___B Some people were unhappy because of the changes. They felt that church services should be kept exactly as they had been in the past.

___C Some people felt that the old ways for church services were all right but that you just can't hang on to them. It makes life easier just to accept some changes as they come along.

18. Welfare Assistance

Here is a situation that came about in a settlement like yours.

There had been a lot of bad years, and more and more people were asking the government for welfare. As time went on, more people were living on welfare only. Three persons were talking about this, and each had a different idea.

—A One person said, "Nobody should ask for welfare unless he is sick or old and can't possibly work. If a man has no money but is able to work, he should look around and find work somewhere to support his family." "

—B A second person said, "Nobody should have to ask for welfare if he has brothers or sisters or close relatives who help out the way they should. Families should help each other out with such problems. "

—C A third person said, "There's nothing wrong with asking for welfare and living off it when a person has no money and no way to support his family. The government has lots of money from taxes on wealthy people, and it is better to ask the government for welfare than live off your brothers or sisters or close friends. "

19. Going Away to School

Several young people from a settlement like yours had gone to a vocational school a long way off so that they could learn things that would help them get jobs. Different persons in the settlement had different ideas about these young people going away to the vocational school.

—A One person said, "It might do them some good. When they come back home here they might find some work. We won't know until they come back. "

—B A second person said, "There are lots of new kinds of work in other places that we don't even know about here. It is right for these young people to go away to the vocational school and learn new things, for then they will always be able to change when things change. "

—C A third person said, "They do not need to learn new things. The old ways are best, the ways of our old people. We should try to work hard and live the old ways, and bring them back when they are lost. "

20. Women in the Modern World

A girl in a settlement like yours left school at the end of Grade Eight. She had always passed with good marks and could have gone on in school, but she preferred to get married and have a family. People saw this in different ways.

Some people thought the girl should have stayed in school for a few more years because she was doing well. They said she could have gone to vocational school or to senior high school and accomplished something in the world. They said that doing things in the world is more important than getting married and raising a family.

Some people said that she should have stayed in school longer in order to become a better wife and mother. They thought that by staying in school she would develop her abilities and become a more complete person. Then she could get married and start raising a family.

Some people said that when a girl prefers to get married and start raising a family, that is more important than going to school. They said that being a mother is the place of women in the world, the most important thing that women do.

21. Leaving Residential School

A sixteen-year-old boy from a settlement like yours had gone away to a residential school a long way off. In the middle of the winter he left the school and came back home. People were talking about this.

Some people thought he should talk over with his parents, or his grandparents, or his home-town school principal why he had come back home in the middle of the school year. In this way the older people would be able to advise him whether he should continue to stay at home or go back to the residential school.

Some people thought he should talk over with friends his own age his reasons for leaving school in the middle of the school year. In this way they could decide among themselves whether he should continue to stay at home or go back to the residential school.

Some people said that leaving the school in the middle of the school year was his own business, and that he didn't have to talk to anyone about it. They said he could decide for himself whether to stay at home or go back to the residential school.

___ C

22. Hunting, Fishing, and Trapping

A certain man in a settlement like yours did a lot of hunting, fishing, and trapping, but did not earn enough money to support his family, although he could have done so by working in a sawmill close to his home. Three people were talking about this.

The first person said, "I believe it is all right to spend your time hunting, fishing and trapping. You have to be able to understand and work with nature - with the wind, the rain, the sun and the snow - if you are to be good at these things. The man who can do this is living a good life, and things will turn out well for him."

___ A

The second person said, "There's not much a person can do by hunting, fishing and trapping to improve things for very long. Good years and bad years come and go, and you get game, or fish, or fur if conditions are right. The best way is just to take things as they come, and do as well as you can."

___ B

The third person said, "It would be better if the man were to work at something he could control better than fish or animals. A man should work where he can manage the things around him, and doesn't have to worry too much about conditions in nature and their effect on how much money he earns."

___ C

23. Types of Discipline

Teachers have different ways of correcting children for poor behavior or bad manners.

Some teachers believe in slapping or shaking or strapping children when they behave badly, so that the children will remember not to do that thing again.

___ A

Some teachers believe in speaking sharply to children and making them feel small when the children behave badly. Then the teachers show the child what the proper behavior is.

___ B

_____C Some teachers believe in speaking firmly but nicely to children when they behave badly, then taking some time and trouble to make sure that the child understands the proper behavior.

24. Sudden Community Wealth

Some people were talking about what a community should do if the government suddenly gave it a lot of money after oil was found in the settlement.

_____A Some said it should be divided up right away among all the families who had homes in the settlement, so that everyone could get what he needed for himself and his family, right now.

_____B Some said it should be saved until everyone had talked over what was best for the settlement for the future. They said if it were given out right away, a lot would be wasted, but if careful plans were made, the money would do good for a long time to come.

_____C Some said it would make too much trouble to let the community have it, because no one knew how to use a lot of money. These people thought the government should keep the money and use it for the community as the government thought best, the way it had done in the past.

25. Occupations

In the spaces below, please write the names of as many kinds of work as you can.

26. Learning English

Three school children were talking about different ways of learning English. Listen to what they said, and say which one you think had the best way, and which one the next best way.

_____A The first one said, "I think the best way is to find out what the words mean. That way it's easier to remember how the words look and sound. A person often has to think about them in our language to find out what they mean."

_____B The second one said, "The best way is to think in English all the time, and not change the words into our language."

_____C The third one said, "The best way is to try hard to remember what the words look like in the book, and how they sound. Then if you are asked to stand up and read for the teacher, you can do it well."

WHAT DO YOU THINK OF THIS QUESTIONNAIRE?

You can help make this a better study by writing down what you think of the questionnaire you have just finished. If you can, please write down your ideas in the spaces below.

1. WERE SOME QUESTIONS HARD FOR YOU TO UNDERSTAND?

Please write down the numbers or names of those questions.

2. WAS IT HARD TO CHOOSE YOUR 1, 2, and 3 IN SOME QUESTIONS?

Please write down the numbers or names of those questions.

3. ARE THE QUESTIONS IMPORTANT?

Please put a circle around the word or words below that come nearest to saying how important you think the questions mostly are:

Very important

Important

Fairly important

Not important

Silly

Parent's Interview Schedule

We would like to know a little bit about you, since you have been so good as to answer all the questions. Would you please tell the interviewer the answers to the following questions. Everything you say will be kept secret - no one else will be told what you have said.

1. Name

2. M or F

3. Your place of birth

4. Year of birth

5. Your age now

6. Number of years of schooling

7. Grade attained

8. Number of years spent in residential schools

9. Treaty

10. Non-treaty

11. If Treaty, Band name and band number

12. Number of different places you have lived

Place	Years

APPENDIX B

PUPIL'S QUESTIONNAIRE



DEPARTMENT OF EDUCATIONAL ADMINISTRATION
UNIVERSITY OF ALBERTA

Northern Schools Study

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XX
XX XX
XX XX
XX XX
XX PUPIL'S QUESTIONNAIRE XX
XX XX
XX XX
XX XX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

February 1966

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
UNIVERSITY OF ALBERTA

Northern Schools Study

PUPIL'S QUESTIONNAIRE¹

Almost all the questions in this questionnaire tell a story with three people in it, or tell about a problem with three possible answers, A, B, or C. There are no right or wrong answers. The questionnaire only asks for your preferences or likes.

After the questions have been read to you, please mark 1 in front of the answer or solution you like best. Then mark 2 in front of the answer or solution you like second best, and 3 in front of the one you like third best. If you like two or even three answers equally well, you may give them each the same number.

The questions will be like the sample on the next page.

¹Only the first two and the last page of the Pupil's Questionnaire have been included in this Appendix, since all schedule items were exactly the same in both Parent's and Pupil's instruments.

EXAMPLE OF QUESTIONS

1. Colors

Three people were discussing the use of light and dark colors.
Each had a different idea.

3 A One person said, "I like black. It is a solid color,
and good contrasts are possible."

1 B A second person said, "I like gray. It goes with
anything, and it is a soft color."

2 C A third person said, "I like white. You can do so
many things with it, and use it anywhere."

Since you prefer light colors, you decide you agree most with
B, so you write 1 opposite the letter B. You like white second best,
so you write 2 opposite the letter C. You like black third best, so
you write 3 opposite the letter A.

There are no right or wrong answers, just preferences or
likes. Some of the questions will seem hard, but read them carefully,
then mark your 1, 2, and 3.

PLEASE DO NOT LEAVE OUT ANY QUESTIONS

THE UNIVERSITY OF TEXAS AT AUSTIN
INSTITUTIONAL RESEARCH AND EVALUATION

APPENDIX C

TEACHER'S AND ADMINISTRATOR'S QUESTIONNAIRE

TEACHER'S AND ADMINISTRATOR'S QUESTIONNAIRE

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

UNIVERSITY OF ALBERTA

Northern Schools Study

TEACHER'S AND ADMINISTRATOR'S QUESTIONNAIRE

January 1966

INSTRUCTIONS FOR COMPLETING THIS QUESTIONNAIRE

This questionnaire consists, with one exception, of a series of items which describe a life situation containing a problem. Three possible solutions to the problem, or ideas about it, follow each problem, and are labelled A, B, and C.

These possible solutions or ideas are to be ranked first, second and third best in order of your preferences for them. The study does not seek your ideas about what should be done, nor what you would actually do in the situation, nor what you think society might expect, but rather, your preferences, as you feel them now, where you are. There are no right or wrong answers, just preferences.

Mark 1 in front of the solution or idea you like best; 2 in front of the solution or idea you like second best; and 3 in front of the solution or idea you like third best. You may give equal ranking to two or even three parts of an item. The last question, #25, is of a different type. It is explained on the item page itself.

Following the completion of the questionnaire items, your evaluation of the questionnaire itself would be welcome. Please state your opinions as to its usefulness and suitability as a method of eliciting values of teachers. A broad guide for your evaluation is provided on page . . .

An example of the items using the life situation approach and one possible ranking of preferences, will be found on the next page.

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

UNIVERSITY OF ALBERTA

Northern Schools Study

TEACHER'S AND ADMINISTRATOR'S QUESTIONNAIRE¹

A research project on education in northern Alberta is being conducted in order to establish the values of pupils, parents, and teachers in the north, together with the implied or expressed values in the stated objectives of education of the provincial curriculum.

As part of the study, all teachers and administrators in Northland School Division #61 are being asked to complete the questionnaire which follows. Parallel investigations using other techniques will be carried out at a later date in the field in order to establish the values of pupils and parents.

The purpose of the total study is to identify the kind and degree of differences in values which exist among the groups noted above, with a view to making recommendations for the improvement and development of public educational services in northern areas.

You will not be asked to give your name, but some information about you is requested on the final page of the questionnaire. This information will be kept strictly confidential, and in the sole possession of the investigator. Reports of the study will be concerned with group values only.

Your co-operation is very much appreciated.

¹The original Teacher's and Administrator's Questionnaire was double-spaced in a manner similar to the Parent's and Pupil's instruments, but is reproduced here in condensed form in order to save space.

EXAMPLE OF QUESTIONNAIRE ITEM

1. Colors

Three people were discussing the use of light and dark colors. Each had a different idea.

3 A One person said, "I like black. It is a solid color, and good contrasts are possible. "

1 B A second person said, "I like gray. It goes with anything, and it is a soft color. "

2 C A third person said, "I like white. You can do so many things with it, and use it anywhere. "

Since you prefer light colors, you decide you agree most with B, so you write 1 opposite the letter B. You like white second best, so you write 2 opposite the letter C. You like black third best, so you write 3 opposite the letter A.

There are no right or wrong answers, just preferences. Some of the distinctions between parts of the items will seem small, but they are there. Read each item carefully, then mark your 1, 2, and 3. You may rank two, or even three parts equally.

This questionnaire takes approximately 45 minutes to complete. Please work thoughtfully.

PLEASE DO NOT OMIT ANY ITEMS

1. Choice of Delegate

A small settlement without any organized local government is to send a representative to a meeting in the provincial capital. How should this delegate be chosen?

___ A Should a meeting be called, and everyone discuss things until almost everyone agrees, so that when a vote is taken almost all the people would agree on the same person?

___ B Should the older, more important leaders in the community take the main responsibility for deciding who should represent the people, since the older leaders are the ones who have long experience in such matters?

___ C Should a meeting be called, names be put up, a vote be taken, and the person sent who gets the majority of the votes, even though many people are still against sending that person?

2. Length of Life

Three persons were talking about whether people themselves can do anything to make the lives of men and women longer.

___ A One said, "It is already true that doctors and others are finding ways to add many years to the lives of most people, through new medicines, immunizations, and the study of foods. If people will pay attention to all these new things, they will almost always live longer. "

___ B A second person said, "I really do not believe there is much that human beings can do to make the lives of men and women longer. I believe that every person has a set time to die, and when that time comes, it just comes. "

___ C A third person said, "I believe that there is a plan to life which works to keep all living things moving together, and if a man will learn to live his whole life by that plan, he will live longer than other men. "

3. Child Training

Some people were talking about the way children should be brought up. Here are three different ideas.

Some people said that children should always be thoroughly taught the traditions of the past. These people believe that the old ways are the best, and when children do not follow the old ways, things go wrong.

___ A

Some people said that children should be taught some of the old traditions, but that it is wrong to insist that they stick to these ways. These people believe that it is necessary for children always to learn about and master those new ways that will best help them get along in the world of today.

___ B

Some people did not believe that children should be taught much about past traditions except as an interesting story of what has gone before. These people believe that the world goes along best when children are taught the things that will help them discover new ways of doing things to replace the old ways.

___ C

4. Job Choice

A man needed a job and had a chance to work for three men. The three employers were different. Consider their viewpoints and indicate which one you think would be the best man to work for.

One employer was a fair enough man who paid a little higher than the going wage, but he was the kind of man who insisted that men work hard and stay on the job. He did not like it all when an employee was absent from work now and again to go on short trips, or for reasons other than illness. He considered it right to dismiss such employees.

___ A

A second employer paid the going wage, but he was not so firm. He understood that employees would sometimes not turn up for a day or two, for many reasons. When his employees did this, he would grumble a little, but the employees would go back to work.

___ B

A third employer paid the going wage. He was firm, but he understood that employees would sometimes not turn up for a day or two, for many reasons. When the employee did come back, however, the employer would always ask him how he expected to become a better worker when he took so much time off. The employer would take the man back on the job if the worker could show that he wanted to learn more and become a better man.

___ C

5. Expectations About Change

Three people were talking about what they thought their children would have when they were grown up. Here is the viewpoint of each of the three persons.

___ A One said, "I really expect my children to have more than I have had if they work hard and plan their lives. There are always opportunities for people who try. "

___ B The second person said, "I don't know whether my children will be better off, worse off, or just the same. Things always go up and down even if one works hard, so we can't really tell."

___ C The third person said, "I expect my children to have just about the same as I have had, or bring things back as they once were. It is their job to work hard and find ways to keep things going as they have been in the past. "

6. Facing Conditions

There are different ways of thinking about how the Creator is related to man, and to weather, and to all other natural conditions which make plants and animals live or die. Here are three possible ways:

___ A The Creator and people work together all the time; the conditions which make plants and animals grow are good or bad depending upon whether people keep themselves in harmony with their Creator and with the forces of nature.

___ B The Creator does not directly use his power to control the conditions which affect the growth of plants and animals. It is up to people themselves to discover how and why conditions change, and to try hard to find ways of controlling conditions.

___ C Man cannot know how the Creator uses his power over the conditions which affect the growth of plants and animals, and it is useless for people to think they can change conditions very much for very long. The best way is to take conditions as they come and do as well as one can.

7. Help in Misfortune

A man suffered a grave misfortune which used up all his savings and cut off his earning power for a time. He and his family had to have

help from someone if they were to get through the winter. Here are three different ways of getting help.

- It would be best if he depended mostly on his brothers and sisters or close friends to help him out as much as possible.
- It would be best for him to try to raise the money on his own, from people who are neither relatives nor employers.
- It would be best for him to go to his employer, or to an older, important relative who is used to managing things in the community, and ask him to help out until things get better.

8. Ways of Living

Three people were talking about how they liked to live. Each one had a different idea.

- One said, "What I care about most is accomplishing things - getting things done just as well or better than other people do them. I like to see results and think that they are worth working for."
- The second person said, "What I care about most is to be allowed to think and act in the manner that best suits the way I really am. Even if I don't get much done, I believe in enjoying life as I go along."
- The third person said, "What I care about most is learning and developing as a person. I like to be active and busy, but it is more important to me to feel that I am becoming a better person than to have a lot to show."

9. Belief in Control

Three men from different cultures were talking about the things that control the weather and other conditions.

- One man said, "My people have never controlled the rain, wind, and other natural conditions, and probably never will. There have always been good years and bad years. That is the way it is, and if you are wise you will take it as it comes and do the best you can."

_____B The second man said, "My people believe that it is the man's job to find ways to overcome weather and other conditions, just as they have overcome so many things. They believe they will one day succeed in doing this, and may even overcome drought and floods."

_____C The third man said, "My people keep things going by working with all the forces which make the rain, the snow, and other conditions. It is when we do the correct things, live in an appropriate way, and keep all that we have in good condition, that all goes well."

10. Philosophy of Life

People often have very different ideas about what has gone before and what we can expect in life. Here are three ways of thinking about these things.

_____A Some people believe that it is best to give the most attention to what is happening now in the present. The past is gone, they say, and the future is too uncertain to count upon. Although things change, sometimes for the better, sometimes for the worse, in the long run life is about the same. People who believe this way think it is all right to keep whatever old ways one likes, but at the same time be ready to accept new ways as they come from year to year.

_____B Some people think that the traditional ways were the best, and that as changes come, things get worse. These people think the best way to live is to work hard to keep up the old ways, and try to bring them back when they are lost.

_____C Some people believe that the ways of the future will be the best, and even though change brings some small setbacks, it brings improvement in the long run. People who believe this think the best way to live is to look a long time ahead, work hard, and give up many things now so that the future will be better.

11. Allocation of Recreation Grant

The government of a large territory announced that a fairly large sum of money would be made available to each small community in the territory to use for setting up recreation facilities. The government believed that the people in the small communities should decide how to use the grant. Different people had different ideas about how to make the plan for the use of the money.

— A One person said, "Our elected representatives and the leaders in our community should decide how to use the grant. They have experience in such things and can tell the government what they think we need. "

— B A second person said, "We should call a community meeting and ask everyone to come with his own ideas. Every idea should be voted on, and the plan that gets the largest number of votes will be the plan we tell the government, even if many people still object to that plan. "

— C A third person said, "We should call a community meeting and talk about what we want until everyone pretty well agrees on a plan. That will be the plan we send to the government. "

12. Use of the Environment

Three different men were in the same occupation, but each had a different approach to the use of the resources of his community in carrying on his occupation.

— One man used the physical and social resources of his community skillfully. He worked hard, but in addition, set himself to living in appropriate ways, which he believed to be those which kept him in harmony with the forces of nature.

— B A second man used the physical and social resources of his community, but only worked hard enough at his occupation to keep things going. He felt that how well he got along in his occupation depended mainly upon conditions beyond his control, and that nothing that people do extra changes things very much.

A third man used the physical and social resources of his community skillfully, and worked hard, making use of all the new scientific ideas he could find in order to improve his occupation. He felt that by doing this he would in most years prevent many of the effects of bad conditions.

13. Housework

Three women were talking about the way they liked to live.

One said she was willing to work as hard as most women, but that she didn't like to spend a lot of time doing extra things in her house or taking up extra things outside.

___ A Instead, she liked to have time free to enjoy herself by visiting with people, going on trips, talking with whomever was around, watching T.V., and so on.

___ B The second woman said that she liked best of all to find extra things to work on, which would interest her, such as improving her home, joining a club, or taking evening courses. She said she was happiest when she was kept busy and getting lots done.

___ C The third woman said that she liked to be active at things that would teach her how to understand herself and life better. She didn't worry about getting much done, as long as she felt she was developing within herself.

14. Wage Work

Three men were talking about three different ways of working. Each man had a different idea.

___ A One said, "I like being my own boss, and doing things my way. Then I can decide what to do, start when I like and stop when I like, and work as hard or as long as I like."

___ B The second man said, "I like to work for a big organization, where I get paid regular wages and where I have a general idea of how many hours a day I will work, and what will be expected of me."

___ C A third man said, "I like to work with a friend or several friends. We would work together as equal partners and decide what to do among ourselves."

15. Family Work Relations

Families who live close together in communities can arrange their work in different ways. Here are three possible ways.

___ A In some communities, each of the separate families (i.e., husband, wife and children) looks after its own business separately from all the others, and is not responsible for the others.

___ B In other communities, the close relatives in the families work together and talk over among themselves the way to take care of whatever problems come up.

- ___C In still other communities, the families that are closely related work together, but have the oldest able person be responsible for the most important things and take charge of these things.

16. Non-working Time

Three men spend their time in different ways when they have no work to do.

- ___A One man spends most of his time learning or trying out things that will help him in his work.

- ___B One man spends his time learning new things which will make him feel he is developing and learning to understand himself better. As long as he feels he is using more of his potential as a human being all the time, he is happy.

- ___C One man spends most of his time watching T. V., or talking, telling stories, singing, and so on, with his friends.

17. Ceremonial Innovation

People in a community like yours saw that the religious ceremonies were changing from what they used to be.

- ___A Some people were really pleased because of the changes in religious ceremonies. They felt that new ways are usually better than old ones, and they like to keep everything, even ceremonies, moving ahead.

- ___B Some people were unhappy because of the change. They felt that religious ceremonies should be kept exactly as they had been in the past.

- ___C Some people felt that the old ways for religious ceremonies were all right, but that you just can't hang on to them. It makes life easier just to accept some changes as they come along.

18. Welfare Assistance

The main industry in a community had gone out of business and more and more people were asking for welfare assistance. As time went on, increasing numbers of people in the community were

living on welfare solely. Three citizens were talking about the situation.

_____ A One person said, "Nobody should ask for welfare unless he is sick or old and can't possibly work. If a man has no money but is able to work, he should look around and find work somewhere to support his family."

_____ B A second person said, "Nobody should have to ask for welfare if he has brothers or sisters or close relatives who help out the way they should. Families should help each other out with such problems."

_____ C A third person said, "There's nothing wrong with asking for welfare and living off it when a person has no money and no way to support his family. The government has large revenues from income taxes on wealthy people, and it is better to ask the government for welfare than be a burden on your brothers or sisters or close friends."

19. Going Away to School

Several young people from a town had gone to technical institutes and universities a considerable distance away from their home town. Different people in the town thought differently about these young people going away to further their education.

_____ A One person said, "It might do them some good. When they come back they might find some work here. We won't know until they come back."

_____ B A second person said, "There are many new kinds of work in other places that we don't even know about here. It is right for these young people to go away to continue their education and learn new things. They will then be able to adapt themselves to the changes that are coming all the time in the world."

_____ C A third person said, "They do not need to learn new things. The traditional ways are best. We should try to live the old ways, and work hard to bring them back when they are lost."

20. Women in the Modern World

A girl left Senior High School before she had finished her program or obtained a diploma. She had always made good marks,

and could have gone on to higher education, but she preferred to get married and raise a family. People saw this situation in various ways.

_____ A Some people thought that the girl should have stayed in school longer because she was doing well. They said she could have gone on to the university or a technical institute and accomplished something in the world. They believed that it is more important for a girl to do things in the world than to get married and raise a family.

_____ B Some people said that she should have stayed in school longer in order to become a better wife and mother. They thought that by staying in school she would develop her abilities and become a more complete person. Then she could get married and start raising a family.

_____ C Some people said that when a girl prefers to get married and start raising a family, that is more important than going to school. They said that being a mother is the place of women in the world, the most important thing that women do.

21. Dropping Out of School

A youth in his mid-'teens had gone away to residential school a considerable distance from the small town which was his home. In the middle of the school year he left the residential school and returned home. People in his community talked about this.

_____ A Some people thought he should talk over with his parents, or his grandparents, or the local school principal his reasons for coming back home in mid-term. By doing this, the older people would be able to advise him whether he should continue to stay at home or go back to the residential school.

_____ B Some people thought he should talk over with friends his own age his reasons for coming back home in mid-term. In this way they could decide among themselves whether he should continue to stay at home or go back to the residential school.

_____ C Some people said that leaving the school in the middle of the term was his own business, and that he didn't have to talk to anyone about it. They said he could decide for himself whether to stay at home or go back to the residential school.

22. Hunting, Fishing, and Trapping

A certain man in an isolated settlement did a lot of hunting, fishing, and trapping, but did not earn enough money to support his family, although he could have done so by working in a sawmill close to his home. Three people were talking about this.

_____A The first person said, "I believe it is all right to spend your time hunting, fishing and trapping. You have to be able to understand and work with nature - with the wind, the rain, the sun and the snow - if you are to be good at these things. The man who can do this is living an appropriate life, and things will turn out well for him."

_____B The second person said, "There's not much a person can do by hunting, fishing and trapping to improve things for very long. Good years and bad years come and go, and you get game, or fish, or fur if conditions are right. The best way is just to take things as they come, and do as well as you can."

_____C The third person said, "It would be better if the man were to work at something he could control better than fish or animals. A man should work where he can manage the things around him, and doesn't have to worry too much about conditions in nature and their effect on his earning power."

23. Types of Discipline

Teachers have differing methods of disciplining children for unacceptable behavior in the classroom.

_____A Some teachers believe in punishing a pupil physically so that the pupil will remember not to behave that way again.

_____B Some teachers believe in using sarcasm and making a child feel small following unacceptable behavior, then explaining acceptable behavior.

_____C Some teachers believe in speaking firmly but courteously to children whose behavior is unacceptable, then taking some time and trouble to make sure that the child understands the nature of acceptable behavior.

24. Sudden Community Prosperity

Some people were discussing about what a community should

do if it were suddenly to acquire a large sum of money from discovery of oil on land for which the community owned oil rights.

_____A Some said the money should be divided up right away among all the permanent residents in the community, so that the citizens could get what they needed for themselves and their families immediately.

_____B Some said it should be saved until everyone in the community had talked over what would be in the best interests of the community both now and in the future. These people said that if it were distributed now, much would be spent foolishly, but that if careful plans were made for the use of the money, it would do good for a long time to come.

_____C Some said that it would make too much trouble to let the community have it, because no one in the community knew how to plan for the use of such a large sum of money. These people thought the government should hold the money in trust for the community, to be used for the community as the government thought best. The people who believed this said that such an arrangement had worked well in similar cases in the past.

25. Occupations

In the spaces below, please write the names of as many occupations as you can.²

_____ ²In the original instrument twenty spaces, similar to the above, were allotted.

YOUR EVALUATION OF THIS QUESTIONNAIRE

Please give your frank opinion as to the usefulness and suitability of this questionnaire as a method of eliciting the values of teachers in northern Alberta.

- I. OBSCURITIES. Note items which you found obscure, and detail the nature of the obscurity.
- II. DIFFICULT CHOICES. Note items in which you found difficulty ranking your preferences.
- III. SUITABILITY. Is this questionnaire appropriate for eliciting values of teachers? List inappropriate items.
- IV. MISCELLANEOUS COMMENTS. (Length of questionnaire, etc.)

Date _____ 1966.

(Use reverse if necessary.)

In order for the results of the questionnaire to be analyzed meaningfully, you are asked to fill in the following items concerning yourself. Your name is not required, and all reports of the study will concern the teachers as groups, not as individuals. ALL INFORMATION WILL BE KEPT STRICTLY CONFIDENTIAL, AND WILL BE CONFINED TO THE INVESTIGATOR ALONE.

1. Teacher Education

Name of Institution	Location	Dates of Attendance	Degree or Diploma Earned
-----	-----	-----	-----
-----	-----	-----	-----

2. Other Higher Education

Name of University,	Location	Dates of Attendance	Degree or Diploma Earned
-----	-----	-----	-----
-----	-----	-----	-----

3. Number of years of teacher education _____

4. Number of years of teaching experience _____

5. Number of years of teaching experience in Indian Schools _____

6. If you are of Indian ancestry, circle correct status below:

Treaty Non-treaty

7. Year of birth _____

8. Sex _____

9. Marital Status _____

APPENDIX D

CORRESPONDENCE

6536 - 112 Street,
Edmonton, Alberta,
October 19, 1965.

Dr. W. D. Knill,
Chairman of the Board,
Northland School Division #61,
9916 - 109 Street,
Edmonton, Alberta.

Dear Dr. Knill,

As you are aware, I plan to carry out, as part of the requirements of my current program in Educational Administration, a study of the value orientations of Indian pupils, Indian parents, and teachers in Northland School Division #61. The proposal calls for the administration of a questionnaire to all pupils of Indian ancestry aged 12 and upwards in St. Theresa, Mistassiniy, and Desmarais Indian Residential schools. A pre-test of the questionnaire to pupils of the age-group mentioned is planned at Calling Lake School.

The teacher questionnaire, somewhat different in form from the pupil questionnaire, is to be completed at the time of the annual Teachers' Convention for Northland Teachers.

The purpose of this letter is to ask permission from the Board of Northland School Division #61 to administer the questionnaires during visits to the schools named. My schedule calls for a visit to Calling Lake around the third week of November, and to the Wabasca-Desmarais area towards the end of January, 1966. It would also be appreciated if the officers of Northland Division could take forward to the Convention Committee the request that approximately one hour of convention time be set aside for the purpose of administering the teacher questionnaire.

The consideration of these requests by your Board will be very much appreciated.

Yours sincerely,

L. R. Gue

NORTHLAND SCHOOL DIVISION NO. 61)	Office of the
9916 - 109 St.)	Secretary
EDMONTON, ALBERTA)	Treasurer

October 29, 1965.

Mr. L. R. Gue,
6536 - 112 Street,
EDMONTON, Alberta.

Dear Sir:

Re yours of the 19th inst.

I am instructed to advise you that the Board have approved your request to administer a questionnaire to all pupils of Indian Ancestry, aged 12 and over, in the St. Theresa, Mistassiniy, Desmarais and Calling Lake schools. Would you please make your arrangements with the principals of the schools concerned.

The Board is of the opinion that your request to administer a teacher questionnaire should be addressed to the Local A. T. A., George Waldo of Fort McMurray is the President and John Ferbey of Grouard the Secretary.

A copy of the completed Thesis would be much appreciated by the Board.

Yours sincerely,

Geo. Hargreaves,
Secretary-Treasurer.

GH/dep

c. c. Circulating File

October 29, 1965.

Mr. H. J. Burkholder,
Principal,
Calling Lake School,
CALLING LAKE, Alberta.

Dear Sir:

Please be advised that Mr. L. R. Gue has been granted permission by the Board to administer a questionnaire to all pupils of Indian Ancestry, aged 12 years and over, at Mistassiniy, Desmarais, St. Theresa and Calling Lake schools.

You will, no doubt, be contacted by Mr. Gue in the near future and your co-operation in the above would be appreciated.

Yours sincerely,

Geo. Hargreaves,
Secretary-Treasurer.

GH/dep

cc: Mr. L. R. Gue,
6536 - 112 Street,
EDMONTON, Alberta.

Circulating File

October 29, 1965.

Mrs. Jean Kapoor,
Principal, St. Theresa School,
WABASCA, Alberta.

Dear Mrs. Kapoor:

Please be advised that Mr. L. R. Gue has been granted permission by the Board to administer a questionnaire to all pupils of Indian Ancestry, aged 12 years and over, at Mistasiniy, Desmarais, St. Theresa and Calling Lake schools.

You will, no doubt, be contacted by Mr. Gue in the near future and your co-operation in the above would be appreciated.

Yours sincerely,

Geo. Hargreaves,
Secretary-Treasurer.

GH/dep

c. c. Mr. L. R. Gue,
6536 - 112 Street,
EDMONTON, Alberta.

Circulating File

October 29, 1965.

Mr. Paul Landis,
Principal,
Mistassiniy Junior High School,
DESMARAIS, Alberta.

Dear Sir:

Please be advised that Mr. L. R. Gue has been granted permission by the Board to administer a questionnaire to all pupils of Indian Ancestry, aged 12 years and over, at Mistassiniy, Desmarais, St. Theresa and Calling Lake schools.

You will, no doubt, be contacted by Mr. Gue in the near future and your co-operation in the above would be appreciated.

Yours sincerely,

Geo. Hargreaves,
Secretary-Treasurer.

GH/dep

cc: Mr. L. R. Gue,
6536 - 112 Street,
EDMONTON, Alberta.

Circulating File

6536 - 112 Street,
Edmonton, Alberta,
November 22, 1965.

Mr. T. D. Baker,
Deputy Superintendent of Schools,
Edmonton Public School Board,
10733 - 101 Street,
Edmonton, Alberta.

Dear Mr. Baker,

As part of the requirements for the Ph. D. program in Educational Administration, I am conducting a study of the value orientations of Indian adolescent pupils, Indian parents, and teachers and administrators in Northland School Division #61. The Kluckhohn-Strodtbeck instrument for the measurement of value orientations is being adapted for use with Indian subjects, and with Alberta teachers. A pre-test of the adapted instruments is necessary, and my thesis adviser suggests that a sample of Edmonton teachers will be satisfactory for the pre-test of the teacher instrument.

I am therefore enclosing the customary form requesting assistance from the Edmonton Public School Board in this initial phase of my research. Your co-operation will be greatly appreciated.

Yours sincerely,

L. R. Gue

1055 - 111 Street
Edmonton, Alberta
November 21, 1952

Mr. T. D. Baker,
Deputy Superintendent of Schools,
Edmonton Public School Board,
10733 - 101 Street,
Edmonton, Alberta.

Dear Mr. Baker,

As part of the requirements for the B.Ed. program in Educational Administration, I am conducting a study of the value orientations of Indian adolescent pupils, Indian parents, and teachers and administrators in Northland School Division #61. The Kishona Strodtbeck instrument for the measurement of value orientations is being adapted for use with Indian subjects, and with Alberta teachers. A pre-test of the adapted instruments is necessary, and my thesis adviser suggests that a sample of Edmonton teachers will be satisfactory for the pre-test of the teacher instrument.

I am therefore enclosing the customary form requesting assistance from the Edmonton Public School Board in this initial phase of my research. Your co-operation will be greatly appreciated.

Yours sincerely,

L. R. Gao

EDMONTON PUBLIC SCHOOL BOARD

10733 - 101 Street
EDMONTON, Alberta

November 30, 1965.

Dr. F. Enns,
Associate Professor,
University of Alberta,
Edmonton, Alberta.

Dear Dr. Enns:

Your request for assistance in graduate student research project on behalf of Mr. L. R. Gue is approved.

Teacher response would be on a voluntary basis. As you know, we prefer to contact schools rather than have this done by graduate students. I would suggest that Mr. Gue arrange to meet with Mr. Evenson and Mr. Bayly at which time a decision may be made as to which schools should be used.

Yours truly,

T. D. Baker,
Associate Superintendent - Instruction.

TDB:dk

cc: A. G. Bayly
A. B. Evenson

FOLLOW-UP POSTCARD

6536 - 112 Street,
Edmonton, Alberta,
January 27, 1966.

Dear _____

As yet I do not appear to have received your completed questionnaire in the Northern Schools Study. I know how many things make demands upon a person's time, but if you could fit it into your schedule in the near future, completion and return of the forms would be much appreciated.

Yours sincerely,

L. R. Gue

FOLLOW-UP LETTER

6536 - 112 Street,
Edmonton, Alberta,
February 23, 1966.

Dear _____

The information in my records indicates that I have not as yet received from you a completed Teacher's and Administrator's Questionnaire in the Northern Schools Study. However, some questionnaires have been returned with the follow-up number removed, and yours may be one of those. If you have already completed and returned the questionnaire, I would like to express my sincere thanks.

The collection of data from Indian parents and pupils at Wabasca has now been completed, and I am anxious to begin processing all data. If you have not completed and returned a questionnaire, I would appreciate very much your doing so in the near future.

In any case, could you complete and return the enclosed postcard?

Yours sincerely,

L. R. Gue

SECOND FOLLOW-UP POSTCARD

Northern Schools Study

(Please check appropriate box)

I have returned the questionnaire by mail _____

I returned the questionnaire at convention _____

Please send me another questionnaire _____

APPENDIX E

SUPPLEMENTARY TABLES

TABLE XLII

FREQUENCY OF CHOICES IN PAIRS OF ALTERNATIVES BY VALUE ORIENTATION AREAS

I. Relational Area				II. Time Area		
	Lin/Coll	Lin/Indiv.	Coll/Indiv.	Past/Pres	Past/Future	Pres/Future
Parents Null Mean	122.5 (105)	112.5 (105)	107.5 (105)	64.0 (90)	55.5 (90)	88.5 (90)
Pupils Null Mean	561.0 (483)	568.0 (483)	544.0 (483)	284.0 (414)	244.5 (414)	315.0 (414)
Teachers Null Mean	484.5 (451.5)	414.5 (451.5)	403.5 (451.5)	160.5 (387)	103.0 (387)	330.0 (387)
U.K. Tchrs. Null Mean	148.0 (140)	132.0 (140)	131.0 (140)	58.5 (120)	42.5 (120)	107.5 (120)

III. Man-Nature Area				IV. Activity Area		
	Subj/Har	Subj/Mast	Har/Mast	Being/Bc	Being/Doing	Bc/Doing
Parents Null Mean	57.5 (75)	64.0 (75)	70.0 (75)	35.0 (75)	47.0 (75)	77.0 (75)
Pupils Null Mean	385.0 (345)	373.0 (345)	321.5 (345)	174.0 (345)	207.5 (345)	355.5 (345)
Teachers Null Mean	227.5 (322.5)	141.0 (322.5)	167.5 (322.5)	148.0 (322.5)	249.0 (322.5)	411.0 (322.5)
U.K. Tchrs. Null Mean	70.5 (100)	35.5 (100)	47.0 (100)	60.5 (100)	103.0 (100)	141.0 (100)

TABLE XLII (continued)

FREQUENCY OF CHOICES IN PAIRS OF ALTERNATIVES BY VALUE ORIENTATION AREAS

	I. Relational Area			II. Time Area		
	Lin/Coll	Lin/Indiv.	Coll/Indiv.	Past/Pres	Past/Future	Pres/Future
Treaty Pupils Null Mean	376.0 (315)	388.5 (315)	380.0 (315)	183.5 (270)	156.0 (270)	205.0 (270)
Non-Treaty Pupils Null Mean	185.0 (168)	179.5 (168)	164.5 (168)	100.5 (144)	88.5 (144)	110.0 (144)
	III. Man-Nature Area			IV. Activity Area		
	Subj/Har	Subj/Mast	Har/Mast	Being/Bc	Being/Doing	Bc/Doing
Treaty Pupils Null Mean	241.5 (225)	240.0 (225)	209.5 (225)	103.5 (225)	131.5 (225)	242.0 (225.)
Non-Treaty Pupils Null Mean	143.5 (120)	133.0 (120)	112.0 (120)	70.5 (120)	76.0 (120)	115.5 (120)



B29867